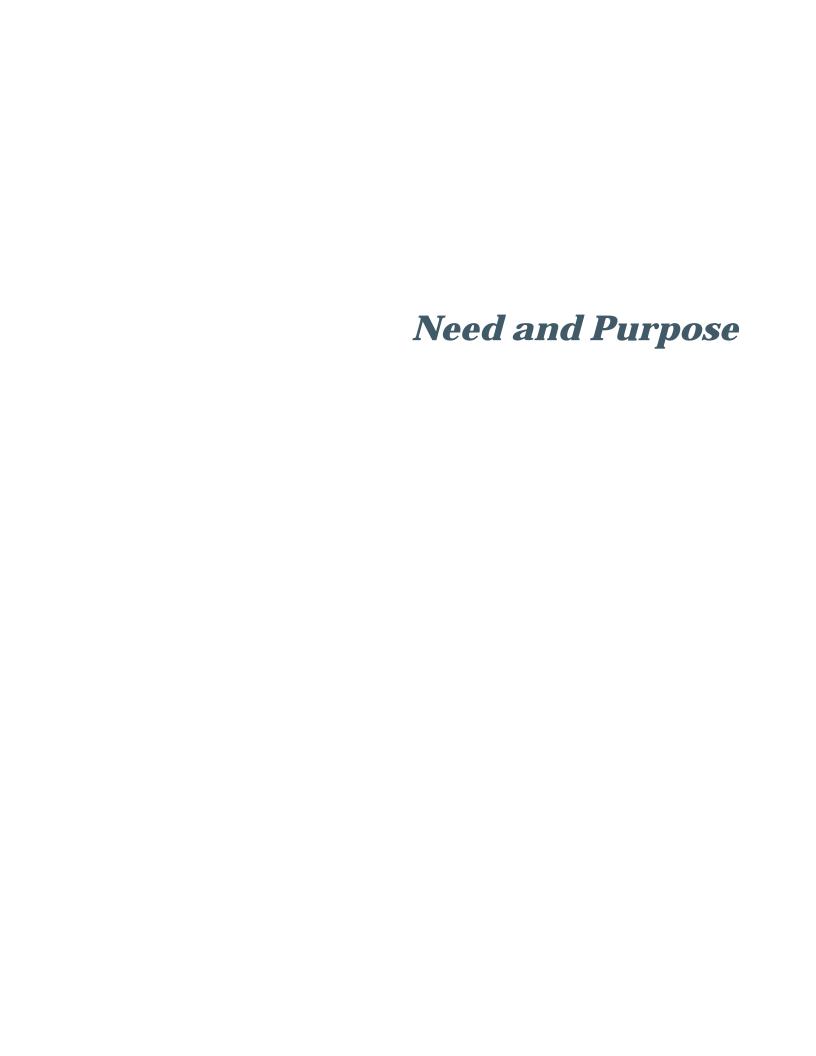
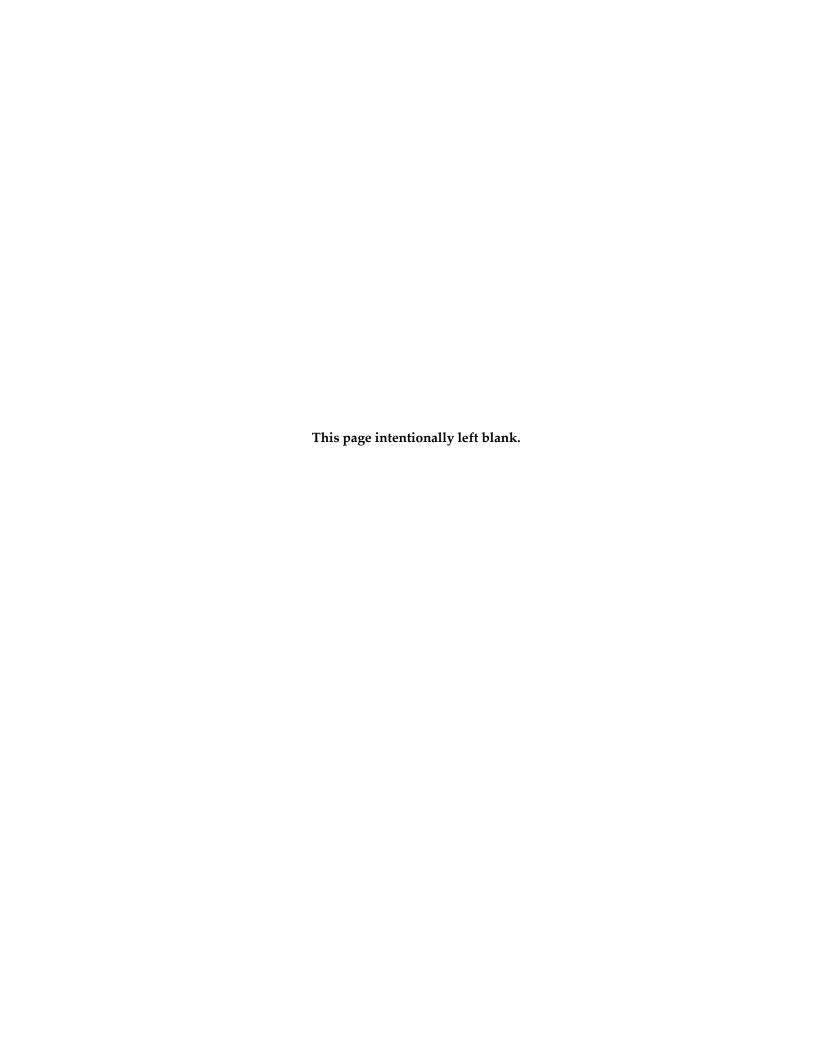
# Appendix L2

# Scoping Concurrence







August 24, 2011

Ms. Vicki Crnich Environmental Affairs Division Texas Department of Transportion 125 East 11th Street Austin, TX 78701

**BOARD OF DIRECTORS** 

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TERRY M. BRECHTEL EXECUTIVE DIRECTOR

Re: Joint Lead Agency Formal Concurrence on Section 6002 Scoping Milestones: Need and Purpose, US 281: Loop 1604 to Borgfeld Drive Environmental Impact Statement, CSJ 0253-04-138 and 0253-04-920

Dear Ms. Crnich,

The Alamo Regional Mobility Authority (Alamo RMA) was created by the Texas Transportation Commission and Bexar County Commissioners Court in 2003 to facilitate needed transportation projects in Bexar County. The Alamo RMA is currently working on an Environmental Impact Statement (EIS) to evaluate possible improvements to US 281 from Loop 1604 to Borgfeld Drive in San Antonio, Bexar County, Texas. The attached scoping memorandum documents compliance with applicable federal and state laws governing decision making and the environmental review process, and signifies the joint lead agency formal concurrence on Section 6002 milestones for development of the Need and Purpose for the US 281: Loop 1604 to Borgfeld Drive EIS. We request your agency's concurrence that these milestones have been accomplished. Please sign the memorandum as indicated and forward to the Federal Highway Administration, Texas Division Urban Engineer (Austin and San Antonio) for signature. Should you have questions regarding the Alamo RMA's request, please contact Lisa Adelman at (210) 495-5499. Thank you for your cooperation.

Sincerely,

Terry M. Brechtel Executive Director

Tan m. Brechtel

Attachment

Alamo Regional Mobility Authority
1222 N. Main Avenue, Suite 1000 San Antonio, Texas 78212
(210) 495-5256 (210) 495-5403 Fax
www.AlamoRMA.org



### **US 281 Environmental Impact Statement**

# Scoping Memorandum Need and Purpose

### 1.0 Introduction

Under Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) the Federal Highway Administration (FHWA) and its partnering lead agencies, the Texas Department of Transportation (TxDOT) and the Alamo Regional Mobility Authority (Alamo RMA) are required to provide an opportunity for involvement by cooperating and participating agencies and the public in defining the need and purpose for the US 281: from Loop 1604 to Borgfeld Drive Environmental Impact Statement (EIS). This memorandum documents how - in collaboration with participating and cooperating agencies and the public - this has been accomplished for the US 281 EIS. The range of alternatives and methodologies to be used and level of detail required for the analysis will be addressed in separate memoranda.

Opportunities for involvement by agencies and the public have primarily been in the form of reviews of the Section 6002 Coordination Plan, participation in meetings, or review of project related materials online at <a href="https://www.411on281.com/us281eis/">www.411on281.com/us281eis/</a>. Cooperating and participating agencies, the Community Advisory Committee (CAC), and the Peer Technical Review Committee are described below, followed by a summary and associated timeline for the need and purpose.

### 1.1 Cooperating and Participating Agencies

The FHWA, TxDOT and Alamo RMA invited the following agencies to be cooperating and/or participating agencies:

- Federal Transit Administration
- U.S. Army Corps of Engineers
- U.S. Department of Agriculture, Natural Resources Conservation Service
- U.S. Environmental Protection Agency (EPA)
- U.S. Fish and Wildlife Service
- U.S. Department of the Interior
- BIA-Anadarko
- Tribal Nations: Apache Tribe of Oklahoma, Wichita and Affiliated Tribes, Alabama-Coushatta
  Tribe of Texas, Alabama-Quassarte Tribal Town, Caddo Nation of Oklahoma, Comanche Nation
  of Oklahoma, Kiowa Indian Tribe of Oklahoma, Mescalero Apache Tribe, Seminole Nation of
  Oklahoma, The Delaware Nation, Tonkawa Tribe of Indians of Oklahoma
- Camp Bullis
- Texas Historical Commission
- Texas Parks and Wildlife Department
- Texas Commission on Environmental Quality
- Bexar County
- City of San Antonio
- Town of Hollywood Park
- Comal County
- City of Bulverde
- Edwards Aquifer Authority

- San Antonio Water System
- San Antonio River Authority
- San Antonio Bexar County Metropolitan Planning Organization
- VIA Metropolitan Transit
- Alamo Area Council of Governments
- Alamo Area Rural Planning Organization
- Bexar Metropolitan Water District

The following agencies returned a letter declining participation with the US 281 EIS:

- U.S. Department of the Interior U.S. Geological Survey
- Alabama-Coushatta Tribe of Texas
- Federal Transit Administration

#### 1.2 Peer Technical Review Committee

All participating and cooperating agencies were invited to agency scoping meetings held in August 2009 and November 2009. The Peer Technical Review Committee was created in an effort to continue this partnership with participating and cooperating agencies. The FHWA, TxDOT and Alamo RMA formed this committee to foster expert oversight and gather input from participating and cooperating agencies at key coordination points throughout the EIS process, including:

- Development of the Need and Purpose to improve the US 281 corridor
- Identification of the range of alternatives for the US 281 corridor
- Collaboration on methodologies to be used
- Completion of the Draft EIS
- Identification and refinement of the Preferred Alternative
- Completion of the Final EIS

The Committee, which is chaired by the FHWA, had its first meeting in November 2009 and will continue to work cooperatively throughout the project to provide input on data and methodologies for the EIS process. Members of the Peer Technical Review Committee include:

- Federal Highway Administration
- Alamo Regional Mobility Authority
- Texas Department of Transportation
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- Texas Parks and Wildlife Department
- Texas Commission on Environmental Quality
- Edwards Aquifer Authority
- Bexar County
- San Antonio Bexar County Metropolitan Planning Organization
- VIA Metropolitan Transit
- San Antonio Water System
- City of San Antonio
- Texas Historical Commission

### 1.3 Community Advisory Committee

A Community Advisory Committee was formed by the Alamo RMA that is comprised of representative groups that live or work along the US 281 corridor. This advisory group has been established by the Alamo RMA to further ensure that members of the community, who may be affected by potential improvements to US 281, have ample opportunity for input and feedback. The committee advises the US 281 team on the following aspects of the EIS process:

- Public involvement and communication activities with stakeholders and the general public related to the development of the EIS
- Development of the Need and Purpose to improve the US 281 corridor
- Identification of the range of alternatives for the US 281 corridor
- Identification and refinement of the Preferred Alternative
- · Consideration of potential social, economic and environmental impacts and mitigation measures

The Community Advisory Committee had its first meeting in August 2009 and continues to work cooperatively to provide input throughout EIS process. Members of the Community Advisory Committee represent the following groups:

- Area Council of Governments
- Alamo Sierra Club
- Aguifer Guardians in Urban Areas
- BexarMet
- Big Springs Homeowners Association
- Camp Bullis/Fort Sam Houston
- Cavalo Creek Homeowners Association
- Cibolo Canyons Resort Community, Inc
- Comal County
- District 9 Neighborhood Alliance
- Emerald Forest Homeowners Association
- Encino Park Homeowners Association
- Greater Edwards Aguifer Alliance
- Greater San Antonio Builders Association
- Lookout Canyon Property Owners Association

- Methodist Stone Oak Hospital
- Mountain Lodge Homeowners Association
- North San Antonio Chamber of Commerce
- Northeast ISD
- Professional Engineers in Private Practice
- Real Estate Council of San Antonio
- San Antonio Toll Party
- San Antonio Water System
- Stone Oak Business Owners Association
- Stone Oak Property Owners Association
- Summerglen Homeowners Association
- Texans Uniting for Reform and Freedom
- Timberwood Park
- VIA Metropolitan Transit Authority
- Town of Hollywood Park

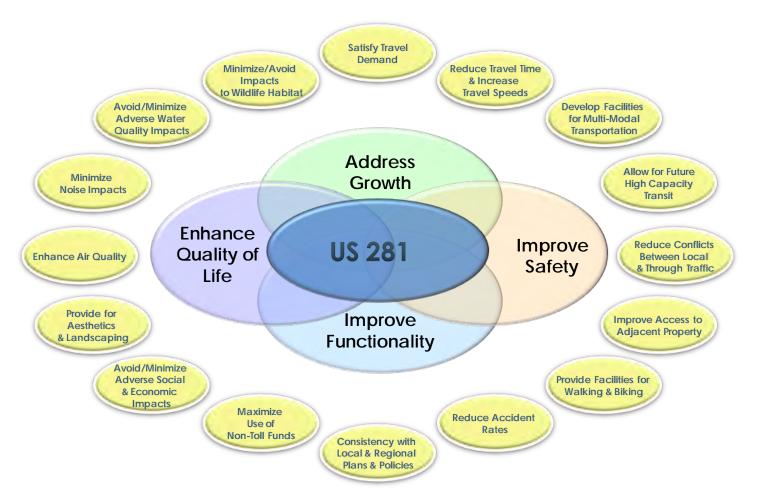
In addition to the Cooperating and Participating Agencies, the Peer Technical Review Committee and the Community Advisory Committee, the general public has been given and will continue to be given the opportunity to participate in the EIS process through public meetings and the public hearing.

### 2.0 Need and Purpose

The need for improvements to US 281 arises from historic and continuing trends in population and employment growth along the US 281 project corridor and within the surrounding areas. This growth generates increasing amounts of vehicle travel, which in turn impedes the function of US 281 to provide regional mobility and local access, leading to lengthy travel delays and a high rate of vehicle crashes. These transportation issues negatively affect the quality of life for communities surrounding the US 281 project corridor. The purpose of US 281 corridor project is to improve mobility and accessibility, enhance safety, and improve community quality of life.

Several project objectives have been identified through preliminary research as well as comments expressed by the lead, cooperating and participating agencies, the Community Advisory Committee, the Peer Technical Review Committee and the public.

Figure 2-1: US 281 Need and Purpose & Project Objectives



Factors contributing to the need for improvements are briefly summarized below and documented more fully in the Draft EIS.

- The number of people living and working within the northern Bexar County and southern Comal County Census Tracts adjacent to US 281 has increased dramatically since 1980. Population and employment is expected to continue growing over the next 25 years.
- The US 281 project corridor has had only minor capacity improvements since the mid-1970s. In 2011 travel demand exceeds capacity during the evening peak period along the most heavily travelled section of the corridor, between Loop 1604 and Marshall Road. Traffic volumes are expected to increase substantially over the next 25 years.
- The high number of intersecting cross-streets and driveways that provide local access along the US 281 project corridor creates many conflict points that contribute to traffic safety and congestion problems. Crash rates on the US 281 project corridor are higher than the statewide rates for similar types of roadways.
- Failure to address the US 281 project corridor's transportation problems has contributed to
  declining quality of life for nearby communities. Harmful vehicle emissions pose health risks;
  excessive traffic noise is unabated; the corridor has become visually and aesthetically
  unappealing; and there is a lack of transportation choices due to the absence of public
  transportation service and facilities for walking and bicycling.

**Table 2.1** describes the coordination points where the joint lead agencies came together to develop and refine the draft Need and Purpose statement for improvements to US 281.

Date	Coordination Point	Who Attended?	Brief Summary	Were Changes Made to the Draft Need and Purpose due to Comments?
7/8/2009 and 7/24/2009	Notice of Intent	FHWA and TxDOT	A Notice of Intent to prepare an EIS was published in the Federal Register and Texas Register. The draft Need and Purpose statement was included.	N/A
7/14/2009	Draft Coordination Plan submitted for review	TxDOT, FHWA, and Alamo RMA	A summary of the draft Need and Purpose statement was included in this document.	Draft Need and Purpose was revised.
8/3/2009	US 281 EIS and Loop 1604 EIS Coordination Meeting	FHWA, TxDOT, Alamo RMA, US 281 EIS Team and Loop 1604 EIS Team	This meeting focused on approaches to indirect and cumulative impact coordination, communication protocol, the use of social media, the Draft Coordination Plan, letters of invitation and scoping meetings.	No changes were made to the draft Need and Purpose.
8/6/2009	Letters of Invitation	FHWA, TxDOT and Alamo RMA	Letters of invitation were sent to cooperating and participating agencies along with Notice of Intent and Draft Coordination Plan. A draft Need and Purpose statement was included.	No disagreement was expressed on draft Need and Purpose; however a comment did express a desire to develop goals and objectives that relate to the draft Need and Purpose.  Based on comments project objectives were developed.
8/27/2009	Agency Scoping Meeting #1	FHWA, Alamo RMA and US 281 EIS Team	The Draft Coordination Plan, which included a summary of the draft Need and Purpose statement, was distributed and comments were requested. A tour was given of the exhibits for Public Scoping Meeting #1.	No disagreement was expressed on draft Need and Purpose.  No changes were made to the draft Need and Purpose.

Date	Coordination Point	Who Attended?	Brief Summary	Were Changes Made to the Draft Need and Purpose due to Comments?
11/10/2009	Peer Technical Review Committee Meeting #1	FHWA, TxDOT, Alamo RMA, Peer Technical Review Committee	This meeting was the initial meeting for this committee. The draft Need and Purpose statement was presented at this meeting.	No disagreement was expressed on draft Need and Purpose.
		Members and US 281 EIS Team		No changes were made to the draft Need and Purpose.
11/17/2009	Agency Scoping Meeting #2	FHWA, TxDOT, Alamo RMA, VIA, and US 281 EIS Team	This meeting discussed the status of the Draft Coordination Plan, and the presentation materials for Public Scoping Meeting #2.	No disagreement was expressed on draft Need and Purpose.
				No changes were made to the draft Need and Purpose.
3/18/2010	Work Session – Alternatives Development and Screening Results	FHWA, TxDOT, Alamo RMA and US 281 EIS Team	This meeting was held to discuss the range of alternatives, the alternatives evaluation process and how it relates to the draft Need and Purpose.	No disagreement was expressed on draft Need and Purpose.
			·	Changes were made to the wording of the project objectives. They were also linked to the components of the draft Need and Purpose.
3/23/2010	US 281 EIS and Loop 1604 EIS Coordination Meeting	FHWA, TxDOT, Alamo RMA, US 281 EIS Team and Loop 1604 EIS Team	The focus of this meeting was the approach for the development of the administrative record, responding to substantive issues raised during public involvement, status of interim projects along US 281 and Loop 1604, request for Draft EIS concurrent reviews and coordination with VIA.	No changes were made to the draft Need and Purpose.
3/25/2010	Peer Technical Review Committee Meeting #2	FHWA, TxDOT, Alamo RMA, Peer Technical Review Committee Members and US 281	The committee reviewed the alternatives development and evaluation process and preliminary recommendations for build alternatives to be carried forward in the Draft EIS. This process was driven by	No disagreement was expressed on draft Need and Purpose.  No changes were made to the draft
		EIS Team	the draft Need and Purpose for improvements to US 281.	Need and Purpose.
4/22/2010	Public Meeting #3 – Presentation Materials Review	FHWA, TxDOT, Alamo RMA & US 281 EIS Team	This meeting was held to review the presentation materials (presentation, exhibits, conceptual schematics and small group exercise) for Public	No disagreement was expressed on draft Need and Purpose.
			Meeting #3. This alternatives development and evaluation process was the focus of Public Meeting #3. This process was driven by the draft Need and Purpose for improvements to US 281.	No changes were made to the draft Need and Purpose.

**Table 2.2** describes the opportunities that were provided to the public and to cooperating and participating agencies to help develop and refine the draft Need and Purpose statement for improvements to US 281.

Date	Opportunity	Who Attended?	Brief Summary (The portion of this opportunity that was focused on Draft Need and Purpose.)	Were changes made to the Draft Need and Purpose due to comments?
8/6/2009	Letters of Invitation	FHWA, TxDOT and Alamo RMA	Letters of invitation were sent to cooperating and participating agencies along with Notice of Intent and Draft Coordination Plan. A draft Need and Purpose statement was included.	No disagreement was expressed on draft Need and Purpose; however a comment did express a desire to develop goals and objectives that relate to the draft Need and Purpose.  Based on comments project objectives were developed.

### 2.2 What Opportunities did Cooperating and Participating Agencies and the Public have to Define the Need and Purpose?

Date	Opportunity	Who Attended?	Brief Summary (The portion of this opportunity that was focused on Draft Need and Purpose.)	Were changes made to the Draft Need and Purpose due to comments?
8/7/2009	Newsletter #1*	Mailed to ~ 40,000 addresses along the corridor	This newsletter described why an EIS was being conducted and emphasized opportunities for public involvement. It also invited the reader to Public Scoping Meeting #1 and directed them to the project website for more information.	N/A
8/20/2009	Community Advisory Committee Meeting #1*	CAC members, Alamo RMA and US 281 EIS Team	This meeting was the kick-off for the Community Advisory Committee. It included a preview of the materials presented at Public Scoping Meeting #1, which introduced the draft Need and Purpose and the supporting data.	No disagreement was expressed on draft Need and Purpose.  No changes were made to the draft Need and Purpose.
8/27/2009	Agency Scoping Meeting #1	FHWA, Alamo RMA and US 281 EIS Team	The Draft Coordination Plan which included a summary of the draft Need and Purpose was distributed and comments were requested. A tour was given of the exhibits for Public Scoping Meeting #1.	No disagreement was expressed on draft Need and Purpose.  No changes were made to the draft Need and Purpose.
8/27/2009	Public Scoping Meeting #1 – Need and Purpose*	Community Members, Media Outlets, an Elected Official, Local, County and Federal Agencies, Alamo RMA and US 281 EIS Team	One of the purposes of this meeting was to identify key project concerns and possible solutions, which could be used in the development of the draft Need and Purpose statement. The draft Need and Purpose and the data supporting it were included in an area of the open house called Station 2 "Does US 281 need to be improved? Why?" This area also included an interactive exhibit that listed needs and asked participants to indicate if each need should be addressed in the US 281 corridor.  The Draft Coordination Plan was made publically available at this meeting. A summary of the draft Need and Purpose was included in this document.	All comments received were incorporated into the EIS record. A copy of the Meeting Report is available on the project website.  No disagreement was expressed on draft Need and Purpose, however comments were received that stressed the importance of specific issues.  Based on comments project objectives were developed. Many of these issues were brought forward in these objectives.

#### 2.2 What Opportunities did Cooperating and Participating Agencies and the Public have to Define the Need and Purpose? **Brief Summary (The portion of this** Were changes made to the Draft Date Opportunity Who Attended? opportunity that was focused on Need and Purpose due to **Draft Need and Purpose.)** comments? 9/30/2009 **VIA Coordination** VIA, Alamo RMA The purpose of this meeting was to No changes were made to the Meeting and US 281 EIS foster collaboration between the VIA draft Need and Purpose. Team Long Range Comprehensive Transportation Plan and Alamo RMA US 281 EIS. Potential park-and-ride locations were also discussed. This relates to the project objectives to develop facilities for multi-modal transportation and allow for future high capacity transit. 10/26/2009 San Antonio - Bexar SA-BC MPO, Alamo This public meeting discussed how The majority of comments RMA and members the funding source for US 281 would County MPO expressed a desire for a non-**Transportation Policy** of the public be presented in the Metropolitan tolled and lower-cost option. Board – Public Transportation Plan (toll verses non-Meeting toll funding). An overpass/expansion alternative began to be developed to address the public desire for an option with a smaller footprint and a lower cost, which relates to the Enhance Quality of Life component of the draft Need and Purpose. 11/2/2009 Newsletter #2\* Mailed to ~40,000 N/A This newsletter briefly described the draft Need and Purpose and invited addresses along the corridor the reader to Public Scoping Meeting #2 and directed them to the project website for more information. 11/4/2009 Community Advisory CAC members, The draft Need and Purpose and Very little disagreement with the Alamo RMA and US Committee objectives were presented via a draft Need and Purpose was Meeting #2\* 281 EIS Team presentation and a small group expressed. Comments were exercise at this meeting. received expressing that some objectives or purposes were less important than others including: provide for aesthetics and landscaping; provide facilities for walking and biking; and allow for future high capacity transit. Based on comments the project objectives were refined. 11/10/2009 Peer Technical FHWA, TxDOT, This meeting was the initial meeting No disagreement was expressed Alamo RMA, Peer for this committee. The draft Need on draft Need and Purpose. **Review Committee** Meeting #1\* **Technical Review** and Purpose was presented at this Committee Based on comments the project meeting. Members and US objectives were refined.

281 EIS Team

### 2.2 What Opportunities did Cooperating and Participating Agencies and the Public have to Define the Need and Purpose?

Date	Opportunity	Who Attended?	Brief Summary (The portion of this opportunity that was focused on Draft Need and Purpose.)	Were changes made to the Draft Need and Purpose due to comments?
11/17/2009	Agency Scoping Meeting #2	FHWA, TxDOT, VIA, Alamo RMA and US 281 EIS Team	This meeting discussed the status of the Draft Coordination Plan, the presentation materials for Public	No disagreement was expressed on draft Need and Purpose.
			Scoping Meeting #2.	No changes were made to the draft Need and Purpose.
	Public Scoping Meeting #2 — Preliminary Project Alternatives*	Community Members, Media Outlets, Local, County and Federal Agencies, Alamo RMA and US 281 EIS Team	The meeting presented the draft Need and Purpose and objectives, a range of alternatives and screening methodology. The draft Need and Purpose was included in the slide presentation, a looping slide presentation, exhibits and a small group exercise.	All comments received were incorporated into the EIS record. Once completed, a copy of the Meeting Report will be available on the project website.  Very little disagreement with the draft Need and Purpose was expressed. Comments were received expressing that some objectives or purposes were less important than others including: provide for aesthetics and landscaping; provide facilities for walking and biking; and allow for future high capacity transit.  Based on comments the project
11/30/2009	VIA Coordination Meeting	TxDOT, VIA, Alamo RMA and US 281 EIS Team	The purpose of this meeting was to discuss the land use scenarios and demographic forecasts for the San Antonio – Bexar County MPO's 2035 Metropolitan Transportation Plan (MTP) modeling effort. This directly relates to the project purpose to address growth.	objectives were refined.  No changes were made to the draft Need and Purpose.
3/25/2010	Peer Technical Review Committee Meeting #2*	FHWA, TxDOT, Alamo RMA, Peer Technical Review Committee Members and US 281 EIS Team	The committee reviewed the alternatives development and evaluation process and preliminary recommendations for the Draft EIS build alternatives. The rationale for these recommendations related back to the draft Need and Purpose statement and objectives for the project.	No disagreement was expressed on draft Need and Purpose.  No changes were made to the draft Need and Purpose.
3/26/2010	VIA Coordination Meeting	VIA, Alamo RMA and US 281 EIS Team	This meeting focused on transit opportunities within the US 281 corridor. This relates to the project objectives to develop facilities for multi-modal transportation and allow for future high capacity transit.	No changes were made to the draft Need and Purpose.

## 2.2 What Opportunities did Cooperating and Participating Agencies and the Public have to Define the Need and Purpose?

Date	Opportunity	Who Attended?	Brief Summary (The portion of this opportunity that was focused on Draft Need and Purpose.)	Were changes made to the Draft Need and Purpose due to comments?
4/1/2010	Newsletter #3*	Mailed to ~40,000 addresses along the corridor	This newsletter briefly reviewed the alternatives evaluation process that is based on draft Need and Purpose and objectives; invited the reader to Public Meeting #3 and directed them to the project website for more information.	N/A
4/7/2010	Community Advisory Committee Meeting #3*	CAC members, Alamo RMA and US 281 EIS Team	This meeting was held to review the presentation materials for Public Meeting #3, which focused on the recommended Reasonable Alternatives. The presentation, exhibits and small group exercise incorporated the draft Need and Purpose.	Very little disagreement with the draft Need and Purpose was expressed. Comments were received expressing that some objectives or purposes were less important than others including: provide for aesthetics and landscaping; provide facilities for walking and biking; and allow for future high capacity transit.
				No changes were made to the draft Need and Purpose.
4/20/2010	VIA Coordination Meeting	VIA, Alamo RMA and US 281 EIS Team	This meeting was held to discuss how transit facilities need to be accommodated within the three major alternatives. This relates to the project objectives to develop facilities for multi-modal transportation and allow for future high capacity transit.	No changes were made to the draft Need and Purpose.
4/29/2010	Public Meeting #3 – Recommended Reasonable Alternatives*	Community Members, Media Outlets, Local, County and Federal Agencies, Elected Officials, Alamo RMA and US 281 EIS Team	This meeting focused on the recommended Reasonable Alternatives. The presentation, exhibits and small group exercises incorporated the draft Need and Purpose. Measures of effectiveness were also presented for each build alternative that related back to the draft Need and Purpose.	All comments received were incorporated into the EIS record. Once completed, a copy of the Meeting Report will be available on the project website.  Very little disagreement with the draft Need and Purpose was expressed. Comments were received expressing that some objectives or purposes were less important than others including: provide for aesthetics and landscaping; provide facilities for walking and biking; and allow for future high capacity transit.
* 11 materia		444 - 204 //	\$281EIS (Including mooting summarie	walking and biking; and future high capacity tran  No changes were made draft Need and Purpose

<sup>\*</sup>All materials are available on <a href="https://www.411on281.com/US281EIS">www.411on281.com/US281EIS</a> (Including meeting summaries, draft coordination plan, exhibits, slide presentations, newsletters, committee rosters, etc.)

In conclusion, the need for improvements to US 281 arises from historic and continuing trends in population and employment growth along the US 281 project corridor and within the surrounding areas. This growth generates increasing amounts of vehicle travel, which in turn impedes the function of US 281 to provide regional mobility and local access, leading to lengthy travel delays and a high rate of vehicle crashes. These transportation issues negatively affect the quality of life for communities surrounding the US 281 project corridor.

The purpose of US 281 corridor project is to improve mobility and accessibility, enhance safety, and improve community quality of life.

Goals and objectives for US 281 were derived from the evaluation of the problems and needs identified by previous studies, from public input during the scoping process, and from meetings with the US 281 Community Advisory Committee (CAC) and the US 281 Peer Technical Review Committee (PTRC). The following goals and objectives were established to help define the direction and character of the EIS and used as points of reference during the development and evaluation of potential alternatives to determine how well each potential alternative performed.

#### Address Growth

- Satisfy travel demand
- Be consistent with local and regional plans and policies
- Develop facilities for multi-modal transportation
- Allow for future high capacity transit

### Improve Functionality

- Reduce travel time and increase travel speeds
- Reduce conflicts between local and through traffic
- Improve access to adjacent property

### Improve Safety

Reduce accident rates

### Improve Quality of Life

- Avoid/minimize adverse social & economic impacts
- Avoid/minimize water quality impacts
- Avoid/minimize impacts to wildlife habitat
- Enhance air quality
- Minimize noise impacts
- Maximize use of non-toll funds
- Provide for aesthetics and landscaping
- Provide facilities for walking & biking

## **Agency Concurrence**

Based on the information summarized in the attached memorandum and supporting documentation contained in the US 281 EIS project record, the Alamo Regional Mobility Authority (Alamo RMA) Texas Department of Transportation (TxDOT) and Federal Highway Administration (FHWA) concur on the following:

- As early as practicable during the US 281 environmental review process, cooperating and participating agencies and the public were provided with opportunities for involvement in defining the US 281 Need and Purpose;
- Following the opportunities for cooperating and participating agencies and public involvement, Alamo RMA, TxDOT and FHWA agreed on the US 281 Need and Purpose statement;
- The US 281 Need and Purpose statement includes a clear statement of the objectives that the proposed improvements are intended to achieve;

Terry M. Brechtel Executive Director

**Alamo Regional Mobility Authority** 

Melissa Neely

**Director of Project Delivery** 

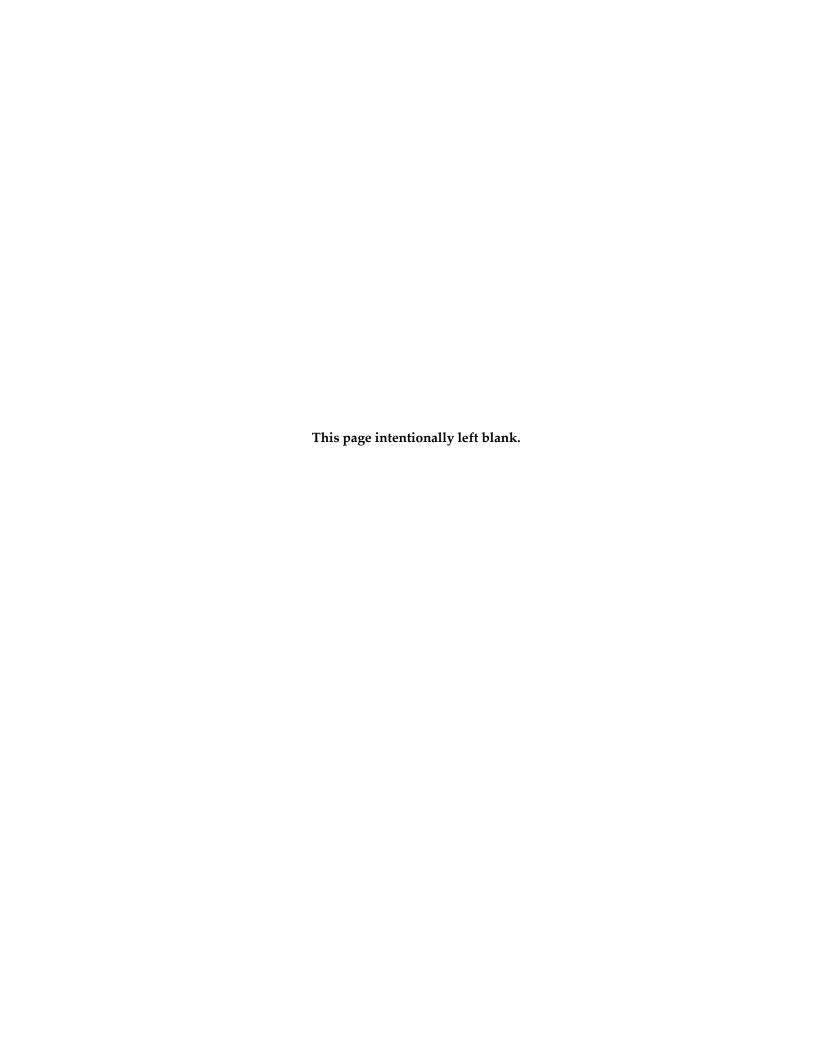
Texas Department of Transportation, Environmental Affairs Division

Justin Ham, P.E.

**Urban Engineer** 

Federal Highway Administration, Texas Division







August 24, 2011

Ms. Vicki Crnich Environmental Affairs Division Texas Department of Transportion 125 East 11<sup>th</sup> Street Austin, TX 78701

BOARD OF DIRECTORS

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TOMMY CALVERT, JR.

ARTHUR J. DOWNEY, JR

JAMES R. REED

ROBERT G. RODRIGUEZ

TERRY M. BRECHTEL EXECUTIVE DIRECTOR

Re: Joint Lead Agency Formal Concurrence on Section 6002 Scoping Milestones: Range of Alternatives, US 281: Loop 1604 to Borgfeld Drive Environmental Impact Statement, CSJ 0253-04-138 and 0253-04-920

Dear Ms. Crnich,

The Alamo Regional Mobility Authority (Alamo RMA) was created by the Texas Transportation Commission and Bexar County Commissioners Court in 2003 to facilitate needed transportation projects in Bexar County. The Alamo RMA is currently working on an Environmental Impact Statement (EIS) to evaluate possible improvements to US 281 from Loop 1604 to Borgfeld Drive in San Antonio, Bexar County, Texas. The attached scoping memorandum documents compliance with applicable federal and state laws governing decision making and the environmental review process, and signifies the joint lead agency formal concurrence on Section 6002 milestone for development of the Range of Alternatives for the US 281: Loop 1604 to Borgfeld Drive EIS. We request your agency's concurrence that this milestone has been accomplished. Please sign the memorandum as indicated and forward to the Federal Highway Administration, Texas Division Urban Engineer (Austin and San Antonio) for signature. Should you have questions regarding the Alamo RMA's request, please contact Lisa Adelman at (210) 495-5499. Thank you for your cooperation.

Sincerely,

Terry M. Brechtel Executive Director

Tan M. Brechtel

Attachment

Alamo Regional Mobility Authority
1222 N. Main Avenue, Suite 1000 San Antonio, Texas 78212
(210) 495-5256 (210) 495-5403 Fax
www.AlamoRMA.org



# US 281 Environmental Impact Statement Scoping Memorandum Range of Alternatives

### 1. Introduction

Under Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) the Federal Highway Administration (FHWA) and its partnering lead agencies, the Texas Department of Transportation (TxDOT) and the Alamo Regional Mobility Authority (Alamo RMA) are required to provide an opportunity for involvement by cooperating and participating agencies and the public in developing the range alternatives for US 281 Environmental Impact Statement (EIS) from Loop 1604 to Borgfeld Drive.

This memorandum documents how - in collaboration with participating and cooperating agencies - this has been and will continue to be accomplished for the US 281 EIS.

All participating and cooperating agencies were invited to agency scoping meetings held in August 2009 and November 2009. In an effort to continue this partnership with participating and cooperating agencies for the US 281 EIS, the Peer Technical Review Committee (PTRC) was created. The FHWA, TxDOT and the Alamo RMA have formed this committee to foster expert oversight and gather input from participating and cooperating agencies at key coordination points throughout the EIS process including:

- Development of the Need and Purpose to improve the US 281 corridor
- Identification of the range of alternatives for the US 281 corridor
- Collaboration on methodologies to be used
- Completion of the Draft EIS
- Identification and refinement of the Preferred Alternative
- Completion of the Final EIS

The Committee, which is chaired by the FHWA, had its first meeting in November 2009 and will continue to work cooperatively throughout the project to provide input on data and methodologies for the EIS process. Members of the PTRC include:

- Federal Highway Administration
- Alamo Regional Mobility Authority
- Texas Department of Transportation
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- Texas Parks and Wildlife Department
- Texas Commission on Environmental Quality
- Edwards Aguifer Authority
- Bexar County
- San Antonio Bexar County Metropolitan Planning Organization
- VIA Metropolitan Transit
- San Antonio Water System
- City of San Antonio
- Texas Historical Commission

A Community Advisory Committee (CAC) was formed by the Alamo RMA that is comprised of representative groups that live or work along the US 281 corridor. This advisory group has been established by the Alamo RMA to further ensure that members of the community, who may be affected by potential improvements to US 281, have ample opportunity for input and

feedback. The committee advises the US 281 team on the following aspects of the EIS process:

- Public involvement and communication activities with stakeholders and the general public related to the development of the EIS
- Development of the Need and Purpose to improve the US 281 corridor
- Identification of the range of alternatives for the US 281 corridor
- Identification and refinement of the Preferred Alternative
- Consideration of potential social, economic and environmental impacts and mitigation measures

The CAC had its first meeting in August 2009 and continues to work cooperatively to provide input throughout EIS process. Members of the CAC represent the following groups:

- Area Council of Governments
- Alamo Sierra Club
- Aquifer Guardians in Urban Areas
- BexarMet
- Big Springs Homeowners Association
- Camp Bullis/Fort Sam Houston
- Cavalo Creek Homeowners Association
- Cibolo Canyons Resort Community, Inc
- Comal County
- District 9 Neighborhood Alliance
- Emerald Forest Homeowners Association
- Encino Park Homeowners Association
- Greater Edwards Aquifer Alliance
- Greater San Antonio Builders Association
- Lookout Canyon Property Owners Association
- Methodist Stone Oak Hospital
- Mountain Lodge Homeowners Association
- North San Antonio Chamber of Commerce
- Northeast ISD
- Professional Engineers in Private Practice
- Real Estate Council of San Antonio
- San Antonio Toll Party
- San Antonio Water System
- Stone Oak Business Owners Association

- Stone Oak Property Owners Association
- Summerglen Homeowners Association
- Texans Uniting for Reform and Freedom
- Timberwood Park
- VIA Metropolitan Transit Authority
- Town of Hollywood Park

In addition to the Cooperating and Participating Agencies, the PTRC and the CAC, the general public has been given and will continue to be given the opportunity to participate in the EIS process through public meetings and the public hearing.

### 2. Range of Alternatives

### How was the Range of Alternatives Developed and Evaluated?

Per the requirements of the National Environmental Policy Act (NEPA) a "No Build" alternative must be considered as part of the EIS process. The US 281 No Build alternative was developed based on the current conditions of the US 281 roadway and includes two operational improvements on US 281 that are currently underway: the US 281 Super Street (at Encino Rio, Evans Road, Stone Oak Parkway and Marshall Road) and the improvement of the US 281/Loop 1604 interchange with direct connectors to the south of Loop 1604. The US 281 No Build alternative was included in the alternatives evaluation process discussed below, and passed through each stage of the evaluation process as it is the baseline against which the build alternatives are evaluated.

The preliminary range of build alternatives represented a variety of transportation improvement strategies to meet the Need and Purpose of the project: *Address Growth, Improve Safety, Improve Functionality, and Enhance Quality of Life.* The preliminary list was refined based on input received from participating and cooperating agencies and the public. The agreed upon range of alternatives was then evaluated through a three-level decision making process as highlighted in **Figure 1** and explained in more detail below. The decision points at each level of evaluation are founded in the Need and Purpose for the project and incorporate input from cooperating and participating agencies and the public as described in **Table 4** and **Table 5**.

**Continuing Public and Agency Involvement** Level 1 Level 2 Level 3 Eliminate with Eliminate with Eliminate with Explanation Explanation Explanation Yes No No **Alternatives** Reasonable Carried Are there Meet part or Satisfy **Alternatives** No Preliminary Forward into to be carried any Fatal all of project need, Alternatives Yes Level 2 objectives? forward for Flaws purpose Evaluation detailed and analysis in Yes objectives? the Draft EIS Meets Greater than 50% of Meets Less than 50% of

Develop Multi-Modal Alternatives

**Future Travel Demand** 

Advance as Other

Alternatives and

**Complementary Elements** 

Yes

Figure 1: Evaluation Process for the Range of Alternatives

**Future Travel Demand** 

Advance as Primary

**Transportation Mode** 

Alternatives

Yes

### **Level 1 Evaluation**

Level 1 evaluation used a fatal flaw, qualitative analysis method that resulted in a pass/fail decision. The criteria used for this level of analysis were grounded in the Need and Purpose for the project.

- <u>Is the alternative compatible with regional and/or corridor plans?</u> This question addressed the planned growth in the region and ensured that alternatives fit into the future vision for the corridor such as the San Antonio-Bexar County Metropolitan Planning Organization (SA-BC MPO) Metropolitan Transportation Plan (MTP) and the Comprehensive Long Range Plan of VIA Metropolitan Transit.
- <u>Is this a proven technology?</u> This question spoke to the functionality of the alternative for the US 281 corridor by ensuring that it had been successfully implemented in other corridors similar to US 281.
- <u>Does the alternative avoid major adverse social, economic and/or environmental impacts?</u> This is related to the quality of life component of the Need and Purpose statement.

The alternatives that did not met all three criteria of Level 1 evaluation did not met the objectives set out in the Need and Purpose and were recommended for elimination. Those alternatives that met the three criteria were advanced to Level 2 evaluation. **Figure 2** illustrates the Level 1 evaluation process and the results of the fatal flaw analysis.

Figure 2: Level 1 Evaluation Process and Results

# **Level 1 Evaluation**Fatal Flaw Analysis

# Preliminary Range of Alternatives

No Build

Heavy Rail

Commuter Rail

Monorail

Automated

**Guideway Transit** 

Personal Rapid Transit

Light Rail

Streetcar

**Fixed Route Bus** 

Express Bus

**Bus Rapid Transit** 

New ParallelCorridor

### **Expand Parallel Corridors**

(Widen Blanco Rd. & Bulverde Rd.)

Grade Separated Intersections

(Overpasses)

Add Lanes to Existing US 281

(No Overpasses)

Upgrade to Expressway

High Occupancy Vehicle / High Occupancy Toll Lanes

**Growth Management** 

Transportation System Management

Transportation Demand Management

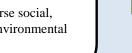
Bike & Pedestrian Facilities

### No Build Alternative Advanced to Level 2 Evaluation

### Pass/Fail Analysis

- 1. Compatible with regional and/or corridor plans
- 2. A proven technology
- Avoids major adverse social, economic and/or environmental impacts







### Eliminated Alternatives

Heavy Rail – Not Compatible with Regional and/or Corridor Plans

Commuter Rail – Not Compatible with Regional and/or Corridor

Plans

Monorail - Not Compatible with Regional and/or Corridor Plans

**Automated Guideway Transit** - Not Compatible with Regional and/or Corridor Plans

Personal Rapid Transit – Not Compatible with Regional and/or Corridor Plans & Unproven Use of Technology in Comparable Corridors

**New ParallelCorridor** – **High Adverse Impacts** 

### Alternatives Advanced to Level 2 Evaluation

Light Rail

Streetcar

**Fixed Route Bus** 

**Express Bus** 

**Bus Rapid Transit** 

### **Expand Parallel Corridors**

(Widen Blanco Rd. & Bulverde Rd.)

Grade Separated Intersections

(Overpasses)

Add Lanes to Existing US 281

(No Overpasses)

Upgrade to Expressway

High Occupancy Vehicle/ High Occupancy Toll Lanes

Growth Management

Transportation System Management

Transportation Demand Management

**Bike & Pedestrian Facilities** 

### **Level 2 Evaluation**

Level 2 evaluation assessed alternatives using four decision points as illustrated in **Figure 3**. The first decision point was a pass/fail decision-making stage consisting of three criteria. Each of the criteria was derived from the Need and Purpose for the project.

### Decision Point 1 -

- <u>Does the alternative reduce conflict between local and through traffic?</u> This question addresses the functionality challenges along the US 281 corridor.
- <u>If implemented, does the alternative improve system connectivity?</u> This question expands upon the project objective or purpose to be consistent with local and regional plans and policies. Specifically for US 281, this refers to the alternative's ability to connect with transit modes.
- <u>Can the alternative reduce crash rates?</u> This question emphasizes the project's need to improve safety within the corridor.

If an alternative failed to meet one or more of the above criteria it was recommended for elimination. Alternatives that met the first three criteria were evaluated against the next three decision points that specifically explored how well each alternative could address the forecasted growth as described in the Need and Purpose. The three decision points were used to categorize alternatives as a Primary Alternative, Other Alternative, or Complementary Element for Level 3 evaluation.

### Decision Point 2 -

• Ability to satisfy at least 50% of forecasted travel demand: The second decision point determined if an alternative could address growth by providing the majority of the capacity needed to meet future travel demand on US 281. Alternatives with sufficient capacity to satisfy 50% or more of the forecasted 2035 travel demand were categorized as Primary Alternatives. Those that could not satisfy at least 50% of the forecasted travel demand but could be viable transportation solutions if combined with other transportation alternatives were passed along to the next decision point.

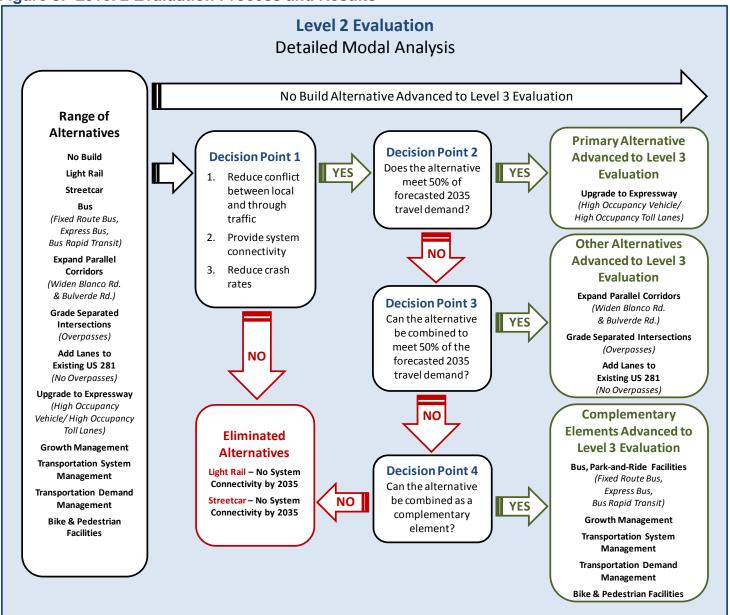
### Decision Point 3 -

<u>Ability to meet 50% of forecasted travel demand as a package:</u> The third decision point evaluated the
remaining alternatives for their ability to satisfy the 50% travel demand threshold as part of a package of
alternatives. Those alternatives that were able to meet the threshold as a part of a package were
categorized as Other Alternatives. Those that could not followed to the final decision point.

### Decision Point 4 -

Ability to function as Complementary Element: The remaining alternatives were then assessed at decision point four for their ability to advance the Need and Purpose of the project as a Complementary Element.
 A Complementary Element is one that can be combined with alternative packages and has the potential to address growth by improving operation of the roadway and thereby enhancing safety, improving quality of life and improving the functionality of the corridor. Alternatives meeting this criterion were advanced as Complementary Elements and the remaining alternatives were eliminated.

Figure 3: Level 2 Evaluation Process and Results



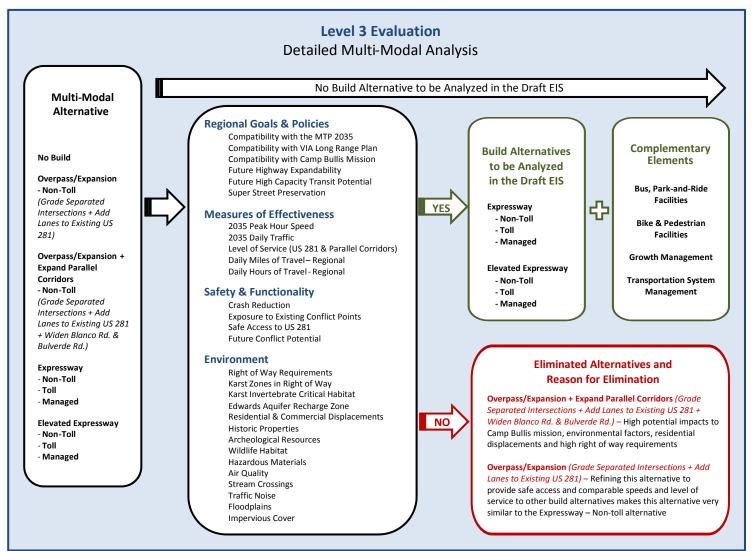
### **Level 3 Evaluation**

Based on input received from cooperating and participating agencies and the public, the Primary and Other Alternatives resulting from Level 2 evaluation were combined to create four multi-modal alternative packages. Level 3 evaluated the four alternative packages against a range of quantitative and qualitative criteria. As highlighted in **Figure 4**, Level 3 evaluation included specific criteria that expanded upon all four components of the Need and Purpose including regional goals and policies, measures of effectiveness (MOEs), metrics of safety and functionality, and environmental considerations. The criteria to be consistent with regional goals and policies was expanded in Level 3 based on public comments to include the Camp Bullis mission, future highway expandability, the potential for future high capacity transit and Super Street preservation. The criteria relating to functionality, safety and quality of life were expanded to include quantitative data to evaluate each alternative.

The Complementary Elements identified in Level 2 evaluation were included in all Reasonable Alternative packages advancing for detailed analysis in the Draft EIS.

In addition, each of the expressway alternatives will be analyzed in the Draft EIS for non-toll, toll and managed lane options. Under the managed lane option, main lanes would offer free passage for transit vehicles and car pools that are registered with a tag in place; all other vehicles, unless exempted by Texas State Law, would pay a fixed fee toll, in accordance with Alamo RMA toll policy. The frontage road lanes would be non-toll. High Occupancy Vehicle lanes and High Occupancy Toll lanes would fall into this category. Another operational approach that was considered and falls within this category is reversible lanes. This approach works best on highways with more than 60 percent of vehicles traveling in one direction during a peak period. The directional split on US 281 does meet this threshold in the AM peak, but traffic during the PM peak is more balanced. Therefore, reversible lanes were not considered further for US 281.

Figure 4: Level 3 Evaluation Process & Results



### **Alternatives Eliminated in Level 3 Evaluation**

Recommendations from the Level 3 evaluation were presented to the public and agencies in March/April 2010. Based on this input, the Overpass/Expansion + Expand Parallel Corridors Alternative was eliminated from further

consideration in the Draft EIS. The Overpass/Expansion Alternative was further studied over the period from April 2010 to June 2011 in an attempt to refine the alternative to meet the project's Need and Purpose. However, though the alternative met some MOEs, it did not perform satisfactorily on all MOEs, and was therefore eliminated from further consideration in the Draft EIS.

### Overpass/Expansion + Expand Parallel Corridors

This alternative is a combination of three alternatives from the Level 2 evaluation. It combines the grade separated intersections (overpass), add lanes to existing US 281 (expansion), and expand parallel corridors (widen Blanco Road and Bulverde Road). This alternative, as presented at Public Meeting #3, proposed new grade separated intersections on US 281 at Redland Road, Encino Rio, Evans Road, Stone Oak Parkway, Marshall Road, Wilderness Oaks, Overlook Parkway, Bulverde Road, and Borgfeld Drive. Additionally, US 281, Blanco Road, and Bulverde Road would be expanded to three lanes in each direction from Loop 1604 to Borgfeld Drive (on Bulverde Road the improvements would end at US 281). This alternative was recommended for elimination at Public Meeting #3 in April 2010 due to the following reasons:

- High potential impact to Camp Bullis mission: The widening of Blanco Road, which is adjacent to Camp Bullis, would have a potential for impact to the Camp Bullis mission
- Right-of-way: The total right-of-way for this alternative was much higher at 573 acres as compared to 345 to 442 acres for the other build alternatives
- Residential Displacements: This alternative impacted 34 residences along the corridors as compared to none to three residences for the other build alternatives
- Environmental Factors: This alternative had higher impact to other environmental factors such as stream crossings and impervious cover as compared to the other build alternatives

In addition to the above factors that are mostly a result of the widening of Blanco Road and Bulverde Road, there were other MOEs like average peak period travel speed, average daily traffic, peak period level of service (LOS), and safe access that were lower than the Expressway and the Elevated Expressway alternative.

### Overpass/Expansion

This alternative is a scaled down version of the previous alternative, with only the additional lanes along US 281 and overpasses at the major intersections, but without any changes to Blanco Road and Bulverde Road as part of this project. The overall intent of the Overpass/Expansion Alternative, as presented at Public Meeting #3, was to develop a "smaller footprint, lower cost" approach to addressing the project's Need and Purpose. This alternative proposed new grade separated intersections at Redland Road, Encino Rio, Evans Road, Stone Oak Parkway, Marshall Road, Wilderness Oaks, Overlook Parkway, Bulverde Road, and Borgfeld Drive. The Overpass/Expansion Alternative and the Elevated Expressway Alternative were presented with driveways and side streets colored red in numerous locations and noted that "Direct access may not by allowed as shown due to safety concerns. Further analysis is required to determine safe access solutions. Solutions include frontage roads, backage roads, and purchase of access rights." In addition to safe access, other MOEs like average peak period travel speed, average daily traffic, and peak period level of service were also lower than the Expressway and Elevated Expressway alternatives. In the months following the April 2010 public meeting the US 281 EIS Team worked to identify safe access solutions and improve mobility performance.

The US 281 EIS Team analyzed two variations of the original Overpass/Expansion Alternative. The original alternative was as presented at Public Meeting #3 in April 2010. The first variation was presented to the CAC and the PTRC in October 2010. The second variation (February 2011) was presented to the CAC in February 2011, and to the PTRC in June 2011. Slide presentations made to all CAC and PTRC meetings are posted to the project Web site, available for viewing at <a href="http://www.411on281.com/us281eis/">http://www.411on281.com/us281eis/</a>.

**April 2010:** This was the original version as presented at Public Meeting #3. The table below provides a comparison of the key differences in the MOEs.

Table 1. Measures of Effectiveness – April 2010					
Criteria	Overpass/Expansion	Expressway	Elevated Expressway		
2035 Average main lane Peak Period Speed (mph)	20	45	45		
2035 Average Daily Traffic on US 281 (thousands	of vehicles) <sup>1</sup>				
South of Bulverde Road	120	120 – 130	115 – 125		
North of Sonterra Boulevard	170	180 – 210	160 – 170		
Percent of centerline miles on US 281 at LOS E/F	80%	30%	40%		

<sup>1</sup> Includes main lanes and frontage roads (where applicable)

This version of the Overpass/Expansion Alternative did not address safe access. It performed much slower and at a lower level of service than the other build alternatives that were recommended for analysis in the Draft EIS. This alternative was refined by the US 281 EIS Team between April 2010 and October 2010.

October 2010: Design changes were made to the Overpass/Expansion Alternative between April 2010 and October 2010 in an effort to address safe access and improve mobility performance while retaining the original "smaller footprint, lower cost" intent of this alternative. Frontage roads were added between Loop 1604 and Stone Oak Parkway to provide safe access to the adjacent land uses. North of Stone Oak, traffic signals replaced originally proposed overpasses at Marshall Road, Wilderness Oaks, Overlook Parkway, Bulverde Road, and Borgfeld Drive, and an additional travel lane in each direction was added. Additionally, proposed right-of-way was expanded to include storm water management features. It should be noted here that the SA-BC MPO travel demand model was modified in June 2010 which resulted in slightly different metrics, even for those alternatives that did not change. The table below summarizes a comparison of the refinements made between April 2010 and October 2010.

Table 2. Measures of Effectiveness – October 2010					
Criteria	Overpass/Expansion	Expressway	Elevated Expressway		
2035 Average main lane Peak Period Speed (mph	n) <sup>1</sup>				
Northern Section	12	45 – 49	37 – 45		
Southern Section	26	35 – 40	34 – 41		
2035 Average Daily Traffic on US 281 (thousands	of vehicles) 2				
South of Bulverde Road	100	135 – 140	130 – 135		
North of Sonterra Boulevard	180	195 – 205	170 – 180		
Percent of centerline miles on US 281 at LOS E/F	80%	25%	20%		

<sup>1</sup> Since the configuration was significantly different north and south of Stone Oak Parkway, speeds were presented separately for each section as compared to a corridor average presented in April 2010

The revised alternative still performed much worse than the Expressway and Elevated Expressway alternatives. In the northern section, due to the addition of traffic signals, the peak period speed decreased to 12 mph as compared to 37-49 mph for the Expressway and Elevated Expressway alternatives. Additionally, the LOS for the corridor was much lower for the Overpass/Expansion Alternative, and safe access concerns still remained north of Stone Oak Parkway.

<sup>2</sup> Includes main lanes and frontage roads (where applicable)

**February 2011:** In order to mitigate safe access concerns and improve mobility in the northern section of US 281, additional changes were made to the October 2010 version. Overpasses were added to major intersections from Marshall Road to Borgfeld Drive in order to improve mobility along US 281. Short sections of discontinuous access roads and parallel driveways were included to provide safe access to the land uses along US 281. The US 281 EIS Team also investigated other strategies for addressing safe access, such as the acquisition of access rights and the construction of backage roads. These approaches were found to be prohibitively expensive (acquisition of access rights) and environmentally harmful (construction of backage roads). The comparison of this alternative with the Expressway and Elevated Expressway alternatives is shown in the table below.

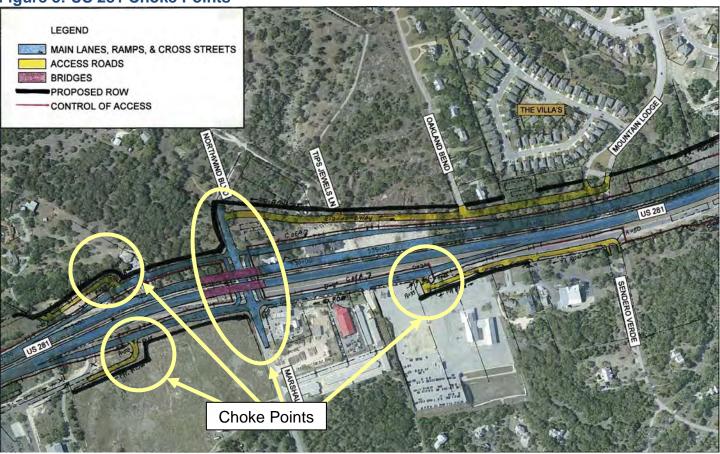
Table 3. Measures of Effectiveness – February 2011					
Criteria	Overpass/Expansion	Expressway	Elevated Expressway		
2035 Average main lane Peak Period Speed (mph	1) 1				
Northern Section	38	45 – 49	37 – 45		
Southern Section	29	35 – 40	34 – 41		
2035 Average Daily Traffic on US 281 (thousands	of vehicles) 2				
South of Bulverde Road	135	135 – 140	130 – 135		
North of Sonterra Boulevard	190	195 – 205	170 – 180		
Percent of centerline miles on US 281 at LOS E/F	40%	25%	20%		

Since the configuration was significantly different north and south of Stone Oak Parkway, speeds were presented separately for each section as compared to a corridor average presented in April 2010

The addition of overpasses and discontinuous access roads north of Stone Oak Parkway to the Overpass/Expansion Alternative improved the MOEs, although this alternative still resulted in a relatively high percentage of centerline miles at LOS E/F compared to the Expressway and Elevated Expressway alternatives. Also, in most cases, the discontinuous access roads required a circuitous route for accessing the adjacent land uses, in turn creating "choke points" where traffic would have to make sharp u-turns, pass through multiple signals, and/or quickly accelerate/decelerate to avoid conflicts with the faster moving main lane traffic.

<sup>2</sup> Includes Main lanes and Frontage Roads (where applicable)

Figure 5: US 281 Choke Points



During the effort to analyze safe access solutions it was determined that the safest and most economical access could be provided by the use of a frontage road in most locations. To incorporate frontage roads throughout the corridor would provide an alternative that was very similar to the Expressway Alternative – Non-toll. After extensive traffic and engineering analysis, the "smaller footprint, lower cost" approach was not able to adequately address the access and mobility needs of the project. This alternative was therefore eliminated from further consideration in the Draft EIS.

### Reasonable Alternatives Recommended for Draft EIS Analysis

Recommendations from the Level 3 evaluation were presented to the public and agencies beginning in March/April 2010 through June 2011 (see **Table 4** and **Table 5**). Based on this input, the following build alternatives have been identified for analysis in the Draft EIS. Each of the Reasonable Alternative packages will be developed to include the complementary elements.

### **Expressway**

The Expressway Alternative is a limited access facility with continuous one-way frontage roads along US 281. It consists of three main lanes and two/three frontage road lanes in each direction. This alternative will be analyzed as non-toll, toll, and managed in the Draft EIS.

### **Elevated Expressway**

The Elevated Expressway Alternative is an elevated limited access roadway with two to three main lanes and two/three frontage road lanes in each direction; existing US 281 lanes would remain in place and function as frontage roads. Along the southern section of the roadway, from Loop 1604 north to Stone Oak Parkway, the

elevated main lanes would be built on the outside of the existing US 281 roadway and would transition to the west side of the existing US 281 roadway on the northern section north of Stone Oak Parkway to Borgfeld Drive. This alternative will be analyzed as non-toll, toll, and managed in the Draft EIS.

Following Public Meeting #3 the US 281 EIS Team analyzed access solutions for safety and compliance with state and federal access policies for the Elevated Expressway Alternative. Access issues resulted in locations where new ramps connect traffic from the elevated lanes to the existing pavement. Direct driveway access in these areas would no longer be available, therefore to address this problem, several short sections of two-way access roads were added to allow drivers to enter and exit these driveways.

The table below describes the coordination points where the joint lead agencies came together to develop and refine the Range of Alternatives for US 281.

Table 4. What were the Coordination Points for the Joint Lead Agencies during the Development of the Range of Alternatives?

Date	Coordination Point	Who Attended?	Brief Summary	Were changes made to the alternatives development and evaluation process due to comments?
8/3/2009	US 281 EIS and Loop 1604 EIS Coordination Meeting	FHWA, TxDOT, Alamo RMA, US 281 EIS Team and Loop 1604 EIS Team	This meeting discussed how the US 281 EIS would be coordinated with the Loop 1604 EIS. In particular it was agreed that data and methodologies for assessing alternatives should be shared.	No changes were made to range of alternatives.
8/27/2009	Agency Scoping Meeting #1	FHWA, Alamo RMA and US 281 EIS Team	This meeting offered an opportunity to preview and comment on the materials to be presented at Public Scoping Meeting #1 which included an introduction to the preliminary range of alternatives.	No disagreement was expressed on the range of alternatives.  Based on comments, the build alternatives will be analyzed for non-toll and toll lane options in the Draft EIS.
11/10/2009	PTRC Meeting #1	FHWA, TxDOT, Alamo RMA, Committee Members and US 281 EIS Team	This meeting discussed the materials proposed for Public Scoping Meeting #2. The topics included a more detailed look at the preliminary range of alternatives, the introduction of the three level alternative evaluation process, and a more detailed look at Level 1 evaluation and the results of this analysis as applied to the preliminary range of alternatives.	No disagreement was expressed on the range of alternatives and evaluation process. Comments were received requesting that High Occupancy Toll Lanes be added to the range of alternatives.  High Occupancy Toll Lanes were added to alternatives.

Table 4. What were the Coordination Points for the Joint Lead Agencies during the Development of the Range of Alternatives?

Date	Coordination Point	Who Attended?	Brief Summary	Were changes made to the alternatives development and evaluation process due to comments?
11/17/2009	Agency Scoping Meeting #2	FHWA, TxDOT, Alamo RMA, VIA, and US 281 EIS Team	This meeting offered an opportunity to preview and comment on the materials to be presented at Public Scoping Meeting #2. Topics included a more detailed look at the preliminary range of alternatives, the introduction of the three level alternative evaluation process, and a more focused discussion about Level 1 evaluation and the results of this level of analysis.	No disagreement was expressed on the range of alternatives and evaluation process.  No changes were made to the alternatives development and evaluation process.
3/18/2010	Work Session – Alternatives Development and Screening Results	FHWA, TxDOT, Alamo RMA and US 281 EIS Team	This meeting reviewed the alternative evaluation process and focused on Level 2 and Level 3 evaluation and the Reasonable Alternatives recommended for Draft EIS analysis.	No disagreement was expressed on the range of alternatives and evaluation process. Comments were received regarding access.  Access solutions were reviewed in more detail (frontage roads, backage roads and the purchase of access rights).
3/23/2010	US 281 EIS and Loop 1604 EIS Coordination Meeting	FHWA, TxDOT, Alamo RMA, US 281 EIS Team and Loop 1604 EIS Team	This meeting reviewed input received from public scoping meetings and discussed how the substantive issues could be addressed in alternatives development and evaluation. This meeting also discussed interim transportation improvements for US 281 and Loop 1604 that will impact the development of alternatives and their evaluation.	No disagreement was expressed on the range of alternatives and evaluation process.  It was agreed that interim projects, such as the US 281 Super Street and US 281/Loop 1604 interchange should be included in the No Build Alternative.  Based on public comments, alternatives were evaluated based on their ability to preserve improvements made by interim projects, such as the US 281 Super Street.

Table 4. What were the Coordination Points for the Joint Lead Agencies during the Development of the Range of Alternatives?

Date	Coordination	Who Attended?	Brief Summary	Were changes made to the
	Point		_	alternatives development and evaluation process due to comments?
3/25/2010	PTRC Meeting #2	FHWA, TxDOT, Alamo RMA, Committee Members and US 281 EIS Team	This meeting reviewed the alternatives development and evaluation process. It focused on Level 3 analysis and the recommended Reasonable Alternatives for Draft EIS analysis.	No disagreement was expressed on the range of alternatives and evaluation process. Comments were provided suggesting minor refinements to the build alternatives. The following changes were made after this meeting to address these comments:  Alternatives were refined to address concerns about access to adjacent property and to main lanes.  Alternatives were refined to illustrate how the project corridor will be integrated with the US 281/Loop 1604 Interchange.  The stub-outs were removed near Borgfeld Drive and an optional ramp pattern was added to improve access.
3/31/2010	Coordination Meeting	TxDOT, Alamo RMA and US 281 EIS Team	This meeting reviewed the recommended Reasonable Alternatives for Draft EIS analysis and the right-of-way costs and access considerations associated with their potential implementation.	No disagreement was expressed on the range of alternatives and evaluation process. Comments were received regarding access.  Access solutions were reviewed in more detail (frontage roads, backage roads and the purchase of access rights).
4/22/2010	Public Meeting #3 – Presentation Materials Review	FHWA, TxDOT, Alamo RMA and US 281 EIS Team	This meeting offered an opportunity to preview and comment on the materials to be presented at Public Meeting #3. Topics included a review of the three level alternative evaluation process, and a more focused discussion about Level 2 and Level 3 evaluation and the recommended Reasonable Alternatives for Draft EIS analysis.	No disagreement was expressed on the range of alternatives and evaluation process.  No changes were made to the alternatives development and evaluation process.
5/12/2010	US 281 EIS and Loop 1604 EIS Coordination Meeting	FHWA, TxDOT, Alamo RMA, US 281 EIS Team and Loop 1604 EIS Team	This meeting reviewed input received from Public Meeting #3 and focused on the recommended Reasonable Alternatives to be analyzed for the Draft EIS.	No changes were made to the alternatives development and evaluation process.

	Alternatives?	ı		
Date	Coordination Point	Who Attended?	Brief Summary	Were changes made to the alternatives development and evaluation process due to comments?
6/22/2010	Coordination Meeting	FHWA, TxDOT, Alamo RMA and US 281 EIS Team	This meeting addressed the access solutions developed for Overpass/Expansion and the Elevated Expressway alternatives.	FHWA concurred with the design modification for Overpass/Expansion and Elevated Expressway, subject to further analysis of mobility performance measures.
10/28/2010	PTRC Meeting #3	FHWA, TxDOT, Alamo RMA, Committee Members and US 281 EIS Team	This meeting included a discussion of design refinements resulting from the analysis of access solutions, storm water management and the revised mobility MOEs.	The members agreed that additional analysis would be completed on Overpass/Expansion to determine whether any further refinements would result in mobility and safety improvements while still satisfying the lower cost and smaller right-of-way features of this alternative.
1/11/2011	US 281 EIS and Loop 1604 EIS Coordination Meeting	FHWA, TxDOT, Alamo RMA, US 281 EIS Team and Loop 1604 EIS Team	There was discussion regarding refinements to Overpass/Expansion, including whether or not the original concept (made available for public comment in April, 2010) had to be carried forward for detailed evaluation in the Draft EIS. The upcoming CAC and PTRC meetings are opportunities for additional review, discussion and refinement.	As a follow-up to comments received from CAC members and PTRC members at their respective October 2010 meetings, additional information on the development of Overpass/Expansion will be presented at the next CAC meeting (February 2011) and the next PTRC meeting (June 2011).
2/3/2011	Alternative Refinement Coordination	TxDOT, Alamo RMA and US 281 EIS Team	This meeting included a discussion that the October 2010 version of Overpass/Expansion did not provide enough mobility improvement to meet the Need and Purpose for the project.  The evaluation of alternatives did not include a minimum threshold for speed or Level of Service. They also explained that Overpass/Expansion was being included in the Draft EIS as a reasonable alternative because it represented a lower cost and smaller footprint alternative to the two expressway alternatives, thereby addressing other elements of the Need and Purpose.	The lead agencies agreed to consider design modifications for Overpass/Expansion to improve mobility performance.

Date	Coordination Point	Who Attended?	Brief Summary	Were changes made to the alternatives development and evaluation process due to comments?
2/7/2011	CAC Meeting #5 – Presentation Materials Review	FHWA, TxDOT, Alamo RMA, US 281 EIS Team and Loop 1604 EIS Team	The purpose of the meeting was to review the draft presentation for CAC Meeting #5.	Changes were made to the slide presentation to incorporate the following clarifications:  Overpass/Expansion has been undergoing additional design since May 2010 to address safe access requirements.  The current version (October 2010) may not go far enough to improve mobility and safe access. Additional design refinement is being considered, including grade-separated interchanges from Marshall Road to Borgfeld Drive with access provided via short sections of access roads and parallel driveways within the right-of-way.  Additional design refinements for Overpass/Expansion may not result in a lower cost and smaller footprint compared to other build alternatives.  Additional design refinement (including revised MOEs and cost estimates) would be presented at a future CAC meeting, a future PTRC meeting, and posted to the web site. Additional public involvement would be considered.
2/10/2011	Alternative Refinement Coordination	TxDOT, Alamo RMA and US 281 EIS Team	This meeting included a discussion of a draft conceptual plan (roll plot) of Overpass/Expansion that included the grade-separated interchanges north of Stone Oak Parkway and discontinuous access roads.	Additional suggestions were provided for revising the wording on slides for the February 2011 CAC meeting.
2/16/2011	Alternative Refinement Coordination	FHWA, TxDOT and Alamo RMA	Telephone meeting to edit slides for the February 2011 CAC meeting.	Additional suggestions were provided for revising the wording on slides for the February 2011 CAC meeting.

Date	Coordination Point	Who Attended?	Brief Summary	Were changes made to the alternatives development and evaluation process due to comments?
3/1/2011	Alternative Refinement Coordination	FHWA, TxDOT, Alamo RMA and US 281 EIS Team	A brief discussion on the February 2011 CAC meeting.  The planned approach for conceptual design changes to Overpass/Expansion were reviewed:  Loop 1604 to Stone Oak Parkway: grade-separated intersections, three main lanes and two frontage road lanes in each direction; SB frontage road is discontinuous;  Stone Oak Parkway to Borgfeld Drive: grade-separated intersections, three main lanes in each direction, access provided via parallel driveways and short, discontinuous frontage roads.	It was agreed to continue to consider the planned approach to refine Overpass/Expansion.
3/31/2011	Alternative Refinement Coordination	FHWA, TxDOT and Alamo RMA	Meeting to discuss the evaluation of Overpass/Expansion.	Participants expressed support to continue consideration of the Overpass/Expansion Alternative's ability to meet Need and Purpose, specifically to improve community quality of life.
5/31/2011	Alternative Refinement Coordination	FHWA, TxDOT and Alamo RMA	A discussion about refinements to Overpass/Expansion and possible phasing options.	Agreement to gather input from the PTRC and CAC members regarding the following recommendation:  The design for Overpass/Expansion would be identical to the Expressway alternative except that it would be considered for non-toll lanes only. Expressway would be considered for toll and managed lane options.

Date	Coordination Point	Who Attended?	Brief Summary	Were changes made to the alternatives development and evaluation process due to comments?
6/22/2011	PTRC Meeting #4	FHWA, TxDOT, Alamo RMA, Committee Members and US 281 EIS Team	The presentation included the development of all the build alternatives and revised MOEs since April 2010.  Additional analysis was completed based on comments received in October 2010. The results of this effort were a recommendation that the design for Overpass/Expansion be identical to the Expressway alternative except that it would be considered for non-toll lanes only. Expressway would be considered for toll and managed lane options. No changes were recommended for the Elevated Expressway alternative.  This meeting also included a discussion of the inclusion of a multi-use path along the US 281 corridor.	No disagreement was expressed on the range of alternatives and evaluation process.  No changes were made to the alternatives development and evaluation process.  Committee members expressed support for including a multi-use path in the build alternatives, clarifying that a single path is envisioned for the corridor, located between the frontage road and right-of-way line, and alternating from one side to the other as needed.
6/29/2011	Email Coordination	FHWA, TxDOT, Alamo RMA	The email included guidance from FHWA to fully describe Overpass/Expansion with clearly stated reasons why it does not meet the Need and Purpose in Draft EIS. Expressway and Elevated Expressway with nontoll, toll and managed lane options would be carried forward in the Draft EIS.	FHWA requested more discussion between the joint lead agencies regarding the definition of managed lanes.  Overpass Expansion will be fully described and dismissed in the Draft EIS and Expressway and Elevated Expressway will be analyzed in detail in the Draft EIS.

Date	Coordination Point	Who Attended?	Brief Summary	Were changes made to the alternatives development and evaluation process due to comments?
7/21/2011	Conference Call – Definition of Managed Lanes	FHWA, TxDOT, Alamo RMA, US 281 EIS Team and Loop 1604 EIS Team	The purpose of this meeting was to come to an agreement on how managed lanes would be defined in the Draft EIS and the elimination of Overpass/Expansion in the Draft EIS.	All joint lead agencies agreed on the following definition of managed lanes:  Main lanes would offer free passage for transit vehicles and car pools that are registered with a tag in place. All other vehicles, unless exempted by Texas State Law, would pay a fixed fee toll, in accordance with Alamo RMA toll policy. The frontage road lanes would be nontoll.  Overpass Expansion will be fully described and dismissed in the Draft EIS and Expressway and Elevated Expressway will be analyzed in detail in the Draft EIS.

The table below describes the opportunities that were provided to the public and to cooperating and participating agencies to help develop and refine the Range of Alternatives for US 281.

Date	Opportunities	Who Attended?	Brief Summary	Were changes made to the alternatives development and evaluation process due to comments?
8/7/2009	Newsletter #1*	Mailed to ~40,000 addresses along the corridor	This newsletter described why an EIS was being conducted and emphasized opportunities for public involvement. It also invited the reader to Public Scoping Meeting #1 and the project website for information.	N/A
8/20/2009	CAC Meeting #1*	Committee Members, Alamo RMA and US 281 EIS Team	This meeting offered an opportunity to preview and comment on the materials presented at Public Scoping Meeting #1 which included an introduction to the preliminary range of alternatives.	No disagreement was expressed on the range of alternatives to be considered.  No changes were made to the range of alternatives.
8/27/2009	Agency Scoping Meeting #1	FHWA, Alamo RMA and US 281 EIS Team	This meeting offered an opportunity to preview and comment on the materials presented at Public Scoping Meeting #1 which included an introduction to the preliminary range of alternatives.	No disagreement was expressed on the range of alternatives to be considered.  Based on comments, the build alternatives will be analyzed for non-toll and toll lane options in the Draft EIS.

Date	Opportunities	Who Attended?	Brief Summary	Were changes made to the alternatives development and evaluation process due to comments?
8/27/2009	Public Scoping Meeting #1*	Community Members, Media Outlets, an Elected Official, Local, County and Federal Agencies, Alamo RMA and US 281 EIS Team	The format for this meeting was open house and the material presented included an introduction to the preliminary range of alternatives.	All comments received were incorporated into the EIS record. A copy of the Meeting Report is available on the project website.  No disagreement was expressed on the range of alternatives to be considered.  No changes were made to the
9/30/2009	VIA Coordination Meeting	VIA, Alamo RMA and US 281 EIS Team	The purpose of this meeting was to foster collaboration between the VIA Long Range Comprehensive Transportation Plan development and Alamo RMA US 281 EIS. Potential park-and-ride locations were also discussed.	range of alternatives.  Potential bus/park-and-ride facilities will be considered for all recommended Reasonable Alternative analyzed for the Draft EIS.
10/26/2009	SA-BC MPO Transportation Policy Board – Public Meeting	SA-BC MPO, Alamo RMA and members of the public	This public meeting discussed how the funding source for US 281 would be presented in the Metropolitan Transportation Plan (toll verses nontoll funding).	The majority of comments expressed a desire for a nontolled and lower-cost option.  The Overpass/Expansion alternative began to be developed to address the public desire for an option with a smaller footprint and a lower cost.
11/2/2009	Newsletter #2*	Mailed to ~ 40,000 addresses along the corridor	This newsletter briefly described the three level alternatives evaluation process. It also invited the reader to Public Scoping Meeting #2 and the project website for information.	N/A
11/4/2009	CAC Meeting #2*	Committee Members, Alamo RMA and US 281 EIS Team	This meeting offered an opportunity to preview and comment on the materials presented at Public Scoping Meeting #2 which included an introduction to the three level alternatives evaluation process and detailed the results of Level 1 evaluation.	No disagreement was expressed on the range of alternatives and evaluation process. Comments were provided that expressed a desire to add one additional alternative.
				The Elevated Expressway alternative was added to the preliminary range of alternatives.

Date	Opportunities	Who Attended?	Brief Summary	Were changes made to the alternatives development and evaluation process due to comments?
11/10/2009	PTRC Meeting #1*	FHWA, TxDOT, Alamo RMA, Committee Members and US 281 EIS Team	This meeting discussed the materials proposed for Public Scoping Meeting #2. The topics included a more detailed look at the preliminary range of alternatives, the introduction of the three level alternative evaluation process, and a more detailed look at Level 1 evaluation and the results of this analysis as applied to the preliminary range of alternatives.	No disagreement was expressed on the range of alternatives and evaluation process. Comments were received expressing a desire to add one additional alternative.  High Occupancy Toll Lanes were added to alternatives.
11/17/2009	Agency Scoping Meeting #2*	FHWA, TxDOT, VIA, Alamo RMA and US 281 EIS Team	This meeting offered an opportunity to preview and comment on the materials to be presented at Public Scoping Meeting #2. Topics included a more detailed look at the preliminary range of alternatives, the introduction of the three level alternative evaluation process, and a more focused discussion about Level 1 evaluation and results.	No disagreement was expressed on the range of alternatives and evaluation process.  No changes were made to the alternatives development and evaluation process.

Table 5. What Opportunities did Cooperating and Participating Agencies and the Public Have to Define the Range of Alternatives?

Date	Opportunities	Who Attended?	Brief Summary	Were changes made to the alternatives development and evaluation process due to comments?
11/17/2009, Cont.	Public Scoping Meeting #2*	Community Members, Media Outlets, Local, County and Federal Agencies, Alamo RMA and US 281 EIS Team	The format for this meeting included an open house, a formal presentation and small group exercises. The material presented included a review of the preliminary range of alternatives and focused on the three level alternative evaluation process and the results of Level 1 evaluation.	All comments received were incorporated into the EIS record. Once finalized, a copy of the Meeting Report will be available on the project website.  Very little disagreement was expressed on the range of alternatives and evaluation process. Comments were received that expressed a desire to add one additional alternative and that stressed the importance of coordination with VIA, Camp Bullis and the ability to expand US 281 in the future. The following changes were made after this meeting to address these comments:  Reversible lanes were considered for the range of alternatives.  Emphasis was placed on coordination with VIA and incorporation of public transportation in all build alternatives.  Compatibility with the Camp Bullis mission, US 281 Super Street preservation and future highway expandability was added to the alternatives evaluation criteria.
11/30/2009	VIA Coordination	TxDOT, Alamo RMA, VIA, and US 281 EIS Team	This meeting discussed the SA-BC MPO's Mobility 2035 land use scenarios and demographic forecast model and the potential effects of the SA-BC MPO forecast on corridor planning.	Alternatives were developed in consideration of future expansion to accommodate high-capacity transit and/or additional travel lanes and were evaluated based on ease of expansion.

Date	Opportunities	Who Attended?	Brief Summary	Were changes made to the alternatives development and evaluation process due to comments?
3/25/2010	PTRC Meeting #2*	FHWA, TxDOT, Alamo RMA, Committee Members and US 281 EIS Team	This meeting reviewed the alternatives development and evaluation process and focused on Level 3 analysis and the recommended Reasonable Alternatives for Draft EIS analysis.	No disagreement was expressed on the range of alternatives and evaluation process. Comments were provided suggesting minor refinements to the build alternatives. The following changes were made after this meeting to address these comments:  Alternatives were refined to address concerns about access to adjacent property and to main lanes.  Alternatives were refined to illustrate how the project corridor will be integrated with the US 281/Loop 1604 Interchange.  The stub-outs were removed
				near Borgfeld Drive and an optional ramp pattern was added to improve access.
3/26/2010	VIA Coordination	Alamo RMA, VIA, and US 281 EIS Team	This meeting focused on transit opportunities within the US 281 corridor. This relates to the project objectives to develop facilities for multi-modal transportation and allow for future high capacity transit.	Alternatives were evaluated based on ease to accommodate potential future high capacity transit within the existing right-of-way.
4/1/2010	Newsletter #3*	Mailed to ~40,000 addresses along the corridor	This newsletter briefly reviewed the three level alternatives evaluation process and introduced the concept of managed lanes, which was presented at Public Meeting #3 as part of the expressway alternative packages.	N/A

Date	Opportunities	Who Attended?	Brief Summary	Were changes made to the alternatives development and evaluation process due to comments?
4/7/2010	CAC Meeting #3*	Committee Members, Alamo RMA and US 281 EIS Team	This meeting offered an opportunity to preview and comment on the materials presented at Public Meeting #3 which included a review of the three level alternatives evaluation process and detailed the results of Level 2 and Level 3 evaluation.	Very little disagreement was expressed on the range of alternatives, evaluation process and recommended Reasonable Alternatives. Comments were expressed favoring one alternative verses another.  No changes were made to the alternatives development and
				evaluation process.
4/20/2010	VIA Coordination	VIA, Alamo RMA and US 281 EIS Team	This meeting discussed the potential sites for park-and-ride facilities on the US 281 corridor and transit program requirements.	Express bus service and park- and-ride facilities were incorporated into all build alternatives.
4/29/2010	Public Meeting #3 – Recommended Reasonable Alternatives*	Community Members, Media Outlets, Local, County and Federal Agencies, Elected Officials,	This meeting included an open house, a formal presentation and small group exercises. Topics included a review of the alternatives evaluation process with particular focus on the results of Level 2 and Level 3 evaluation and the	All comments received were incorporated into the EIS record. Once finalized, a copy of the Meeting Report will be available on the project website.
		Alamo RMA and US 281 EIS Team	recommended Reasonable Alternatives for Draft EIS analysis.	Very little disagreement was expressed on the range of alternatives, evaluation process and recommended Reasonable Alternatives. Comments were expressed favoring one alternative verses another.
				The build alternatives were refined.
9/1/2010	E-newsletter #1	~800 email addresses	Discussion of context sensitive solutions for US 281, a recap from Public Meeting #3 (April 2010) and a brief description of the build alternatives being analyzed in the Draft EIS.	N/A

Date	Opportunities	Who Attended?	Brief Summary	Were changes made to the alternatives development and evaluation process due to comments?
9/23/2010	VIA Coordination	VIA, Alamo RMA and US 281 EIS Team	The participants met to update each other on the VIA Long Range Comprehensive Transportation Plan and the US 281 EIS, discuss draft conceptual plans for the build alternatives, including provisions for a park-and-ride facility at Stone Oak Parkway and an envelope for future high-capacity transit, and review overall progress on the July 2010 Letter of Agreement between VIA and the Alamo RMA.	US 281 EIS Team and VIA will further explore the development of a park-and – ride facility near Stone Oak Parkway.
10/1/2010	E-newsletter #2	~800 email addresses	This newsletter included a discussion of low impact development considerations for all build alternatives.	N/A
10/6/2010	CAC Meeting #4*	Committee Members, Alamo RMA and US 281 EIS Team	This meeting included a discussion of design refinements resulting from the analysis of access solutions, storm water management, and the revised mobility MOEs.	The US EIS Team will complete additional analysis on Overpass/Expansion to determine whether any further refinements would result in mobility and safety improvements while still satisfying the lower cost and smaller right-of-way features of this alternative.
10/28/2010	PTRC Meeting #3*	FHWA, TxDOT, Alamo RMA, Committee Members and US 281 EIS Team	This meeting included a discussion of design refinements resulting from the analysis of access solutions, storm water management and the revised mobility MOEs.	The members agreed that additional analysis would be completed on Overpass/Expansion to determine whether any further refinements would result in mobility and safety improvements while still satisfying the lower cost and smaller right-of-way features of this alternative.
2/1/2011	E-newsletter #5	~800 email addresses	This newsletter described the EIS process and the build alternatives be considered in the Draft EIS.	N/A

Table 5. What Opportunities did Cooperating and Participating Agencies and the Public Have to Define the Range of Alternatives?

Date	Opportunities	Who Attended?	Brief Summary	Were changes made to the alternatives development
				and evaluation process due to comments?
2/16/2011	CAC Meeting #5*	FHWA, TxDOT, Alamo RMA, Committee Members, and US 281 EIS Team	The previous refinement of Overpass/Expansion, presented to the CAC in October 2010, provided only minimal mobility and safety improvements north of Stone Oak Parkway as compared to the No Build Alternative, which was why the US 281 EIS Team is continuing to consider additional design refinements.  This meeting detailed the three safe access solutions considered for refinement of Overpass/Expansion including: frontage roads, the purchase of access rights and backage roads.  In addition, mobility MOEs and cost	Additional analysis will be completed on Overpass/Expansion to determine whether any further refinements would result in mobility and safety improvements while still satisfying the lower cost and smaller right-of-way features of this alternative.
			estimates were presented for each alternative.	
6/22/2011	PTRC Meeting #4*	FHWA, TxDOT, Alamo RMA, Committee Members and US 281 EIS Team	The presentation included the development of all the build alternatives and revised MOEs since April 2010.	No disagreement was expressed on the range of alternatives and evaluation process.
			Additional analysis was completed based on comments received in October 2010. The results of this effort were a recommendation that	No changes were made to the alternatives development and evaluation process.
			the design for Overpass/Expansion be identical to the Expressway alternative except that it would be considered for non-toll lanes only. Expressway would be considered for toll and managed lane options. No changes were recommended for the Elevated Expressway alternative.	Committee members expressed support for including a multi-use path in the build alternatives, clarifying that a single path is envisioned for the corridor, located between the frontage road and right-of- way line, and alternating from one side to the other as
			This meeting also included a discussion of the inclusion of a multiuse path along the US 281 corridor.	needed.

Date	Opportunities	Who Attended?	Brief Summary	Were changes made to the alternatives development and evaluation process due to comments?
6/22/2011	CAC Meeting #6*	FHWA, TxDOT, Alamo RMA, Committee Members, and US 281 EIS Team	The presentation included the development of all the build alternatives and revised MOEs since April 2010.  Additional analysis was completed based on comments received in October 2010. The results of this effort were a recommendation that the design for Overpass/Expansion be identical to the Expressway alternative except that it would be considered for non-toll lanes only. Expressway would be considered for toll and managed lane options. No changes were recommended for the Elevated Expressway alternative.	No disagreement was expressed on the range of alternatives and evaluation process. Some members expressed concern that Overpass/Expansion was no longer a small footprint and low cost option. Some members also stated that it would be confusing for the Overpass/Expansion and Expressway alternatives to be the exact same design.  No changes were made to the alternatives development and evaluation process.

<sup>\*</sup>All materials are available on <a href="www.411on281.com/US281EIS">www.411on281.com/US281EIS</a> (Including meeting summaries, draft coordination plan, exhibits, slide presentations, newsletters, committee rosters, etc.)

# 3. Conclusion

In conclusion, the following alternatives will be considered in the Draft EIS. Each of the Reasonable Alternative packages will be developed to include the four direct connector ramps that comprise the northern half of the US 281 interchange with Loop 1604 and complementary elements.

# **Expressway**

The Expressway Alternative is a limited access facility with continuous one-way frontage roads along US 281. It consists of three main lanes and two/three frontage road lanes in each direction. This alternative will be analyzed as non-toll, toll, and managed in the Draft EIS.

# **Elevated Expressway**

The Elevated Expressway Alternative is an elevated limited access roadway with two to three main lanes and two/three frontage road lanes in each direction; existing US 281 lanes would remain in place and function as frontage roads. Along the southern section of the roadway, from Loop 1604 north to Stone Oak Parkway, the elevated main lanes would be built on the outside of the existing US 281 roadway and would transition to the west side of the existing US 281 roadway on the northern section north of Stone Oak Parkway to Borgfeld Drive. This alternative will be analyzed as non-toll, toll, and managed in the Draft EIS.

# **Agency Concurrence**

Based on the information summarized in the attached memorandum and supporting documentation contained in the US 281 EIS project record, the Alamo Regional Mobility Authority (Alamo RMA) Texas Department of Transportation (TxDOT) and Federal Highway Administration (FHWA) concur on the following:

- As early as practicable during the US 281 environmental review process, cooperating and participating
  agencies and the public were provided with opportunities for involvement in defining the range of
  alternatives to be considered in the US 281 EIS;
- Following the opportunities for cooperating and participating agencies involvement, Alamo RMA, TxDOT and FHWA agreed on the reasonable Proposed Build Alternatives to be evaluated in detail in the US 281Draft EIS;
- Following the opportunities for cooperating and participating agencies involvement, Alamo RMA, TxDOT and FHWA agreed that the reasonable Proposed Build Alternatives meet the Need and Purpose of the project.

Terry M. Brechtel Executive Director

Alamo Regional Mobility Authority

Melissa Neeley

Project Delivery Director

Texas Department of Transportation

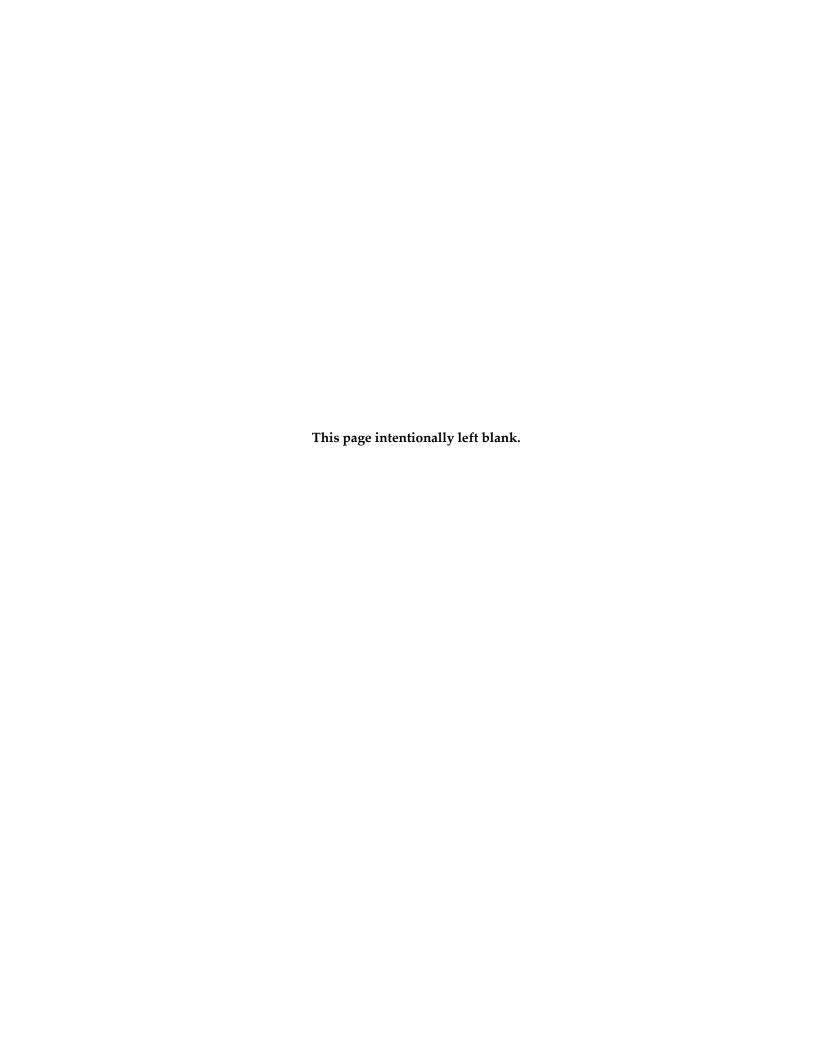
Justin Ham, P.E.

Urban Engineer

Federal Highway Administration, Texas Division

Brechtel

# Methodologies Used and Level of Detail in the Evaluation of Alternatives





August 24, 2011

Ms. Vicki Crnich Environmental Affairs Division Texas Department of Transportion 125 East 11<sup>th</sup> Street Austin, TX 78701

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EXECUTIVE DIRECTOR

Re: Joint Lead Agency Formal Concurrence on Section 6002 Scoping Milestones: Methodologies to be Used and Level of Detail in the Evaluation of Alternatives, US 281: Loop 1604 to Borgfeld Drive EIS, CSJ 0253-04-138 and 0253-04-920

Dear Ms. Crnich,

The Alamo Regional Mobility Authority (Alamo RMA) was created by the Texas Transportation Commission and Bexar County Commissioners Court in 2003 to facilitate needed transportation projects in Bexar County. Currently, the Alamo RMA is working on an Environmental Impact Statement (EIS) to evaluate possible improvements to US 281 from Loop 1604 to Borgfeld Drive in San Antonio, Bexar County, Texas. The attached memorandum documents compliance with applicable federal and state laws governing decision making, the environmental review process and signifies the joint lead agency formal concurrence on Section 6002 milestones for development of the Methodologies to be used and Level of Detail in required the Evaluation of Alternatives for the US 281: Loop 1604 to Borgfeld Drive EIS. We request your concurrence that these milestones have been accomplished. Please sign the memorandum as indicated and forward to the Federal Highway Administration, Texas Division District Engineer for signature. Should you have questions regarding the Alamo RMA's request, please contact Lisa Adelman at (210) 495-5499. Thank you for your cooperation.

Sincerely,

Terry M. Brechtel

Tay m. Prichtel

**Executive Director** 

Attachment

Alamo Regional Mobility Authority
1222 N. Main Avenue, Suite 1000 San Antonio, Texas 78212
(210) 495-5256 (210) 495-5403 Fax
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# **US 281 Environmental Impact Statement**

# **Scoping Memorandum**

# Methodologies Used and Level of Detail in the Evaluation of Alternatives

## 1.0 Introduction

Under Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) the Federal Highway Administration (FHWA) and its partnering lead agencies, the Texas Department of Transportation (TxDOT) and the Alamo Regional Mobility Authority (Alamo RMA) are required to provide an opportunity for involvement by cooperating and participating agencies and the public in developing methodologies used and level of detail in the evaluation of alternatives for US 281 from Loop 1604 to Borgfeld Drive Environmental Impact Statement (EIS).

This memorandum documents how - in collaboration with participating and cooperating agencies - this has been and will continue to be accomplished for the US 281 EIS.

All participating and cooperating agencies were invited to agency scoping meetings held in August 2009 and November 2009. In an effort to continue this partnership with participating and cooperating agencies for the US 281 EIS, the Peer Technical Review Committee was created. The FHWA, TxDOT and the Alamo RMA have formed this committee to foster expert oversight and gather input from participating and cooperating agencies at key coordination points throughout the EIS process including:

- Development of the Need and Purpose to improve the US 281 corridor
- Identification of the range of alternatives for the US 281 corridor
- Collaboration on methodologies to be used
- Completion of the Draft EIS
- Identification and refinement of the Preferred Alternative
- Completion of the Final EIS

The Committee, which is chaired by the FHWA, had its first meeting in November 2009 and will continue to work cooperatively throughout the project to provide input on data and methodologies for the EIS process. Members of the Peer Technical Review Committee include:

- Federal Highway Administration
- Alamo Regional Mobility Authority
- Texas Department of Transportation
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- Texas Parks and Wildlife Department
- Texas Commission on Environmental Quality
- Edwards Aquifer Authority
- Bexar County
- San Antonio Bexar County Metropolitan Planning Organization
- VIA Metropolitan Transit
- San Antonio Water System
- City of San Antonio
- Texas Historical Commission



# 2.0 Methodologies and Level of Detail in the Evaluation of Alternatives

Policy Act (NEPA) of 1969, as amended, and in accordance with NEPA regulations issued by the Council on Environmental Quality (CEQ) (40 Code of Federal Regulations [CFR] 1500-1508), Federal Highway Administration (FHWA) regulations and policies (23 The development of methodologies to analyze issues and resources is being coordinated among the Joint Lead Agencies and participating agencies. All applicable federal and state laws and current regulatory guidance will be followed for each section of the Draft and Final EIS. What follows are topics where coordination is occurring or may occur on methodologies and level of detail for analysis of the alternatives. The EIS will be prepared pursuant to the National Environmental CFR 771), FHWA Technical Advisory T6640.8A, and in accordance with 43 Texas Administrative Code.

Table 1: Resource Specific Methodology for Draft EIS and Final EIS Analysis and Agency Coordination on Methodologies and Level of Detail in the Evaluation of Alternatives

Environmental Justice Toll Analysis	Social and Community Resources, including Environmental Justice	Farmlands	Land Use	Resources
Primary guidance for the environmental justice toll analysis is provided by Joint Guidance for Project and Network Level Environmental Justice, Regional Network Land Use, and Air Quality Analysis for Toll Roads (2009), FHWA and TxDOT. The San Antonio – Bexar County MPO developed a Regional Toll and Managed Lane Analysis (draft July 2010) that will be used by both the US 281 EIS and Loop 1604 EIS upon acceptance by FHWA. Separate project level EJ analyses will be developed by the respective EIS teams in compliance with the referenced FHWA and TxDOT guidance.	Using both 2010 and 2000 Census Data, the Draft EIS will address demographics, housing, neighborhoods, community cohesion, potential relocations and displacements and the requirements of the Uniform Relocation and Real Property Acquisition Policies Act of 1970, economic effects, employment, community and public resources, and bicycle and pedestrian facilities. The Executive Order on Environmental Justice (EJ) will be addressed with respect to minority and low-income populations, including Limited English Proficiency.	Guidance for this topic derives from the Farmland Protection Policy Act (FPPA 1981), which is administered by the United States Department of Agriculture's Natural Resource Conservation Service (NRCS). A Farmland Conversion Impact Rating Form (form NRCS-CPA-106) will be completed. Soil data will be obtained from the NRCS Soil Survey of Bexar County.	Historic, existing and currently planned/proposed land uses will be studied and documented to evaluate the interface between land use and the US 281 transportation network and the proposed alternatives. Existing land use will be determined in a 0.5-mile radii, or 0.25-mile on either side of each proposed alternative alignment centerline. Planned and/or proposed land use will be discussed in terms of local government plans and policies.	Methodology for Draft EIS
Any subsequent updates to the San Antonio – Bexar County MPOs <i>Regional Toll and Managed Lane Analysis</i> will be utilized to analyze the Preferred Alternative.	The Final EIS will update and replace 2000 Census data to the most current 2010 Census datasets available and document any changes to potential impacts associated with the Preferred Alternative.	Updates to the NRCS-CPA-106 form will be coordinated with the NRCS if the right-of-way for the Preferred Alternative differs from that proposed in the Draft EIS.	The Final EIS will use the same method and will update any changes to land use subject to changes in the alignment centerline of the Preferred Alternative. In addition, local government plans and policies will be updated to reflect any changes.	Methodology for Final EIS
O5/11/09 – US 281 EIS and Loop 1604 EIS Decision-Makers Kickoff Meeting (FHWA, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team)  O6/01/09 – Regional Toll Analysis Meeting (FHWA, TxDOT, San Antonio-Bexar County MPO, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team)  O5/12/10 – US 281 EIS and Loop 1604 EIS Decision-Makers Meeting (FHWA, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team)  O1/11/11 – US 281 EIS and Loop 1604 EIS Decision-Makers Meeting (FHWA, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team)	None.	07/15/2010 — Coordination initiated with the NRCS. 07/22/2010 — Response received from NRCS.	None.	Specific Agency Coordination Conducted To Date

Resources	Methodology for Draft EIS	Methodology for Final EIS	Specific Agency Coordination Conducted To Date
Joint Development	The Draft EIS will identify and discuss any joint development measures which will preserve or enhance the social, economic, environmental, and visual values of the community surrounding US 281. It will also identify the benefits to be derived, those who will benefit and the entities responsible for maintaining the identified measures.	The same method will be used to identify and discuss joint development measures related to the Preferred Alternatives in the Final EIS.	None.
Cultural Resources	The Draft EIS will rely on cultural resource studies performed in support of the 2007 Environmental Assessment for US 281, under which Section 106 requirements were completed and which sufficiently cover the current Area of Potential Effects (APE). The Draft EIS will document the effect of project alternatives on cultural resources as determined by previous coordination with the Texas Historical Commission.	Additional field surveys for historic and archeological resources will be conducted for the Preferred Alternative and documented in the Final EIS. A public meeting regarding the Preferred Alternative is scheduled to occur after the Draft EIS Public Hearing and prior to circulation of the Final EIS. The results of the cultural resource surveys and Section 106 coordination will be shared with the public at this public meeting.	06/02/09 – US 281 EIS and Loop 1604 EIS ICI Coordination Meeting (FHWA, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team) 08/11/10 – US 281 EIS Cultural Resources Coordination Meeting (TxDOT, Alamo RMA, US 281 EIS Team)
Air Quality	Using TxDOT's Air Quality Guidelines (2006) as the primary guidance, the Draft EIS will prepare a carbon monoxide (CO) analysis using TxDOT's Carbon Monoxide Look-Up Table and a qualitative assessment of Mobile Source Air Toxics (MSAT) with a sensitive receptor assessment for all alternatives. In addition, traffic volumes for the Draft EIS are being developed by the US 281 EIS Team based on existing volumes and the San Antonio-Bexar County MPO's current travel demand model.	The Final EIS will have a quantitative MSAT assessment completed for the Preferred Alternative which would include roadway emissions produced during the base year, the year construction is complete, and the design year. Traffic data for the Final EIS will be based on design level traffic volumes coordinated and approved by TxDOT TP&P Division.  Depending on the final date of implementation of a new eight-hour ozone standard, the Final EIS would potentially address a new standard and the regional strategies for addressing non-attainment.	06/02/09 – US 281 EIS and Loop 1604 EIS ICI Coordination Meeting (FHWA, TXDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team) 08/31/10 – US 281 EIS ICI Coordination Meeting (FHWA, TXDOT, Alamo RMA, US 281 EIS Team) 01/11/11 – US 281 EIS and Loop 1604 EIS Decision-Makers Meeting (FHWA, TXDOT, Alamo RMA, US 281 EIS Team)
Traffic Noise	This analysis will be completed in accordance with 23 CFR 772 and use FHWA's traffic noise model (TNM 2.5). FHWA has recently published new guidance, Highway Traffic Noise: Analysis and Abatement Guidance (2010), and TxDOT's newly released Guidelines for Analysis and Abatement of Roadway Traffic Noise (April 2011). The analysis for the Draft EIS will include a detailed model for each alternative in a flat plan for roadways, receptors, and barriers. This strategy would be a conservative approach in traffic noise estimations for the Draft EIS and would include the specific number and location of affected receivers and proposed feasible and reasonable noise abatement. Traffic volumes for the Draft EIS are being developed by the US 281 EIS Team based on existing volumes and the San Antonio-Bexar County MPO's current travel demand model.	The analysis for the Final EIS will be completed in accordance with the 2011 TxDOT noise policy and include a detailed traffic noise analysis for the Preferred Alternative, including the specific number and location of affected receivers and proposed feasible and reasonable noise abatement. Traffic data for the Final EIS will be based on design level traffic volumes coordinated and approved by TxDOT TP&P Division.	08/26/10 – US 281 EIS and Loop 1604 EIS Decision-Makers Meeting (FHWA, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team) 01/11/11 – US 281 EIS and Loop 1604 EIS Decision-Makers Meeting (FHWA, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team) 01/28/11 - US 281 EIS and Loop 1604 EIS Traffic Noise Coordination Letter to TxDOT Environmental Affairs Division 04/06/11 - US 281 EIS and Loop 1604 EIS Traffic Noise Coordination Conference Call (FHWA, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team)

Resources	Methodology for Draft EIS	Methodology for Final EIS	Specific Agency Coordination Conducted To Date
Water Quality	Baseline and potential impacts to water quality will include an inventory of surface waters in the US 281 corridor, as well as listing 303(d) stream segments per TCEQ's Texas Surface Water Standards, which complies with Section 303(d) of the Federal Clean Water Act. A groundwater quality inventory and assessment may include, but is not limited to: geology and karst recharge features, sources of contamination, aquifer flow paths and discharge. In addition, a survey of public drinking water systems will include a review of water supply wells and published groundwater reports in the corridor.	The same method will be utilized to analyze water quality impacts for the Preferred Alternative in the Final EIS; however, in compliance with the Edwards Aquifer Rules coordination with TCEQ would be initiated for Phase I storm water permits, which includes a Texas Pollutant Discharge Elimination System (TPDES) permit and a Notice of Intent (NOI) General Permit. In addition, and in accordance with TCEQ policies, a Storm Water Pollution Prevention Plan (SWPPP) would be developed and TxDOT's Storm Water Management Guidelines for Construction Activities would provide guidance for temporary erosion control measures during construction. Best management practices would be identified to avoid/minimize impacts to water quality. Low Impact Development (LID) will also be considered in the Final EIS for the Preferred Alternative following RG-348 Complying with the Edwards Aquifer Rules Technical Guidance on Best Management Practices. According to this guidance, the LID techniques currently approved by TCEQ are bioretention, permeable friction course, Filterra®, Stormfilter®, and Stormceptor®.	None.
		are bioretention, permeable friction course, Filterra®, Stormfilter®, and Stormceptor®.	
Floodplains	This analysis will be completed using the Flood Insurance Rate Maps published by the Federal Emergency Management Agency (FEMA) for Bexar County. The locations of the 100-year floodplain within the areas of the proposed alternative alignments will be determined. Floodplain impacts to be assessed may include, but are not limited to: increased impermeable surface area and linear feet of 100-year floodplain crossings.	The same method will be utilized to analyze floodplain impacts for the Preferred Alternative. In addition, a hydraulic study will be conducted to locate and size culverts and bridges at stream crossings.	None.
Wetlands and Other Waters of the United States	A survey will take place of the general types of wetlands that occur in the US 281 project corridor using published USFWS National Wetland Inventory (NWI) maps and the Cowardin classification system of wetlands and deepwater habitat, as well as aerial photographs and USGS topographic maps. Field reconnaissance would preliminarily verify the presence of wetland areas within existing and proposed right-of-way.	A wetland delineation will be performed within the Preferred Alternative right-of-way and will include a preliminary jurisdictional determination and potential impacts assessment. Final wetland determination(s) would be decided by the USACE and the resource agencies during the Section 404 permitting process, if necessary. Permitting and mitigation requirements would be determined as needed.	None.
Water Body Modification and Wildlife Impacts	The draft EIS will identify the location and extent of any water body modifications (e.g., impoundment, relocation, channel deepening, filling, etc.). The use of any stream or body of water for recreation, water supply, or other purposes will be identified. Impacts to fish and wildlife resulting from any loss, degradation, or modification of aquatic or terrestrial habitat will also be discussed.	The same method will be utilized in the Final EIS to identify any water body modification and wildlife impacts related to the Preferred Alternative.	None.

Resources	Methodology for Draft EIS	Methodology for Final EIS	Specific Agency Coordination Conducted To Date
			<b>05/11/09 – US 281 EIS and Loop 1604 EIS Decision-Makers Meeting</b> (FHWA, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team)
	Avian surveys have been completed and karst invertebrate surveys have occurred within 500 feet of the proposed ROW for all proposed Build		<b>01/22/10 – US 281 EIS Endangered Species Act Coordination Meeting</b> (USFWS, Alamo RMA, US 281 EIS Team)
	Alternatives where right-of-entry has been granted. Methods for the avian surveys follow the most recent U.S. Fish and Wildlife Service (USFWS)		<b>03/23/10 - US 281 EIS and Loop 1604 EIS Decision-Makers Meeting</b> (FHWA, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team)
	Requirements for Conducting Presence/Absence Surveys for Endangered Golden-cheeked Warblers, (2006). Methods for the karst surveys follow the USFWS protocol outlined in USFWS Section 10(a)(1)(A) Scientific Permit	A biological accompatuall be submitted in consultation with HCEM/C for	<b>09/15/10 – US 281 EIS and Loop 1604 EIS Endangered Species Act Coordination Meeting</b> (USFWS, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team)
Endangered Species	Requirements for Conducting Presence/Absence Surveys for Endangered Karst Invertebrates in Central Texas, (2006) and Geologic Controls on Cave	the Preferred Alternative and impacts and mitigation will be analyzed.	10/18/10 - US 281 EIS and Loop 1604 EIS – Letter to USFWS requesting guidance on bird survey methodologies.
	Texas Region, (Veni, 1994). The potential for occurrence and the need for consultation with USFWS and Texas Parks and Wildlife Department (TPWD)		<b>01/11/11 – US 281 EIS and Loop 1604 EIS Decision-Makers Meeting</b> (FHWA, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team)
	will be discussed in the Draft EIS. Coordination with USFWS regarding species surveys and methodologies will be ongoing and will include karst-specific meetings.		03/01/11 - US 281 EIS and Loop 1604 EIS – Endangered Species Act Coordination Meeting (USFWS, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team)
			05/11/11 - US 281 EIS and Loop 1604 EIS – Response letter from USFWS regarding bird surveys.
Hazardous Materials	The Hazardous Materials Assessment will be completed per the TxDOT standard search radii (typically 0.25 to 1 mile) for federal and state (ASTM and TxDOT) environmental databases and documented in the Draft EIS.	The same method will be utilized to identify hazardous materials within the standard search radii of the Preferred Alternative in the Final EIS.	None.
Visual and Aesthetic Qualities	This evaluation will follow guidance developed by the FHWA including Esthetics and Visual Quality Guidance Information (1986), Environmental Impact Statement Visual Impact Discussion (undated), and Visual Impact Assessment for Highway Projects (1981).	The same method will be utilized to analyze visual and aesthetic impacts of the Preferred Alternative in the Final EIS.	None.

Resources	Methodology for Draft EIS	Methodology for Final EIS	Specific Agency Coordination Conducted To Date
Energy	The Draft EIS will discuss in general terms the construction and operational energy requirements and conservation potential for each alternative.	The Final EIS will identify any energy conservation measures that will be implemented as a part of the Preferred Alternative.	None.
Construction Impacts	The Draft EIS will discuss the potential adverse impacts associated with construction of each build alternative and identify appropriate mitigation measures.	The Final EIS will identify, as appropriate, any proposed mitigation for the Preferred Alternative related to construction impacts.	None.
Relationship of Local Short-term Uses verses Long-term Productivity	The Draft EIS will discuss in general terms the proposed alternatives' relationship to local short-term impacts and use of resources, and the maintenance and enhancement of long-term productivity.	The same general discussion will be applied to the Preferred Alternative in the Final EIS.	None.
Irreversible and Irretrievable Commitment of Resources	The Draft EIS will discuss in general terms the build alternatives' irreversible and irretrievable commitment of resources.	The same general discussion will be applied to the Preferred Alternative in the Final EIS.	None.
Climate Change	A qualitative discussion of greenhouse gas emissions will be presented in the Draft EIS.	The same method will be utilized to analyze climate change impacts of the Preferred Alternative in the Final EIS. Additional analysis may be performed in the event that FHWA issues regulatory guidance on the topic of climate change/greenhouse gas emissions.	None.

Resources	Methodology for Draft EIS	Methodology for Final EIS	Specific Agency Coordination Conducted To Date
			<b>05/11/09 – US 281 EIS and Loop 1604 EIS Decision-Makers Kickoff Meeting</b> (FHWA, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team)
			<b>06/02/09 – US 281 EIS and Loop 1604 EIS ICI Coordination Meeting</b> (FHWA, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team)
			<b>03/23/10 - US 281 EIS and Loop 1604 EIS Decision-Makers Meeting</b> (FHWA, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team)
	Principal guidance is provided by TxDOT's <i>Guidance on Preparing Indirect</i>		<b>05/12/10 – US 281 EIS and Loop 1604 EIS Decision-Makers Meeting</b> (FHWA, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team)
Indirect and Cumulative Impacts	and Cumulative Impact Analyses (2010), as well as the National Cooperative Highway Research Program (NCHRP) Report 466, Desk Reference for Estimating Indirect Effects of Proposed Transportation Projects (National Research Council, 2002). Coordination meetings are ongoing with the Loop 1604 EIS Team, San Antonio-Bexar County MPO, US 281 EIS Land Use Panel, TxDOT ENV and the Joint Leads regarding guidance, area of influence, encroachment-alteration effects, induced	The same method will be utilized to analyze indirect and cumulative impacts of the Preferred Alternative in the Final EIS.	<b>06/23/10 – US 281 Land Use Panel Workshop #1</b> (FHWA, Alamo RMA, US 281 EIS Team, Blanco ISD, Comal ISD, City of Bulverde, City of San Antonio, Comal County, San Antonio-Bexar County MPO, San Antonio Water System, Edwards Aquifer Authority, University of Texas at San Antonio, Greater Brazos River Authority, Camp Bullis, and other lane use experts)
	development for each alternative, effects related to induced growth, resource study areas, history and health of each resource, past, present and reasonably foreseeable future projects, and funding option (non-toll, toll, and managed).		<b>07/21/10 - US 281 Land Use Panel Workshop #2</b> (FHWA, Alamo RMA, US 281 EIS Team, Blanco ISD, Comal ISD, City of Bulverde, City of San Antonio, Comal County, San Antonio-Bexar County MPO, San Antonio Water System, Edwards Aquifer Authority, University of Texas at San Antonio, Greater Brazos River Authority, Camp Bullis, other lane use experts, )
			<b>08/26/10 – US 281 EIS and Loop 1604 EIS Decision-Makers Meeting</b> (FHWA, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team)
			<b>08/31/10 – US 281 EIS ICI Coordination Meeting</b> (FHWA, TxDOT, Alamo RMA, US 281 EIS Team)
			01/11/11 – US 281 EIS and Loop 1604 EIS Decision-Makers Meeting (FHWA, TxDOT, Alamo RMA, US 281 EIS Team, Loop 1604 EIS Team)

# 3.0 Conclusion

A draft memo describing the US 281 EIS Methodologies and Level of Detail in the Alternatives Analysis was sent to all participating and cooperating agencies on November 4, 2010 requesting that each agency review and comments received during this period are attached to this memo and have been used to revise **Table 1**. This table includes the methods and level of detail in the evaluation of alternatives agreed upon by the participating and cooperating agencies.

# **Agency Concurrence**

Based on the information summarized in the attached memorandum and supporting documentation contained in the US 281 EIS project record, the Alamo Regional Mobility Authority (Alamo RMA) Texas Department of Transportation (TxDOT) and Federal Highway Administration (FHWA) concur on the following:

- As early as practicable during the US 281 environmental review process, cooperating and participating
  agencies were provided with opportunities for involvement in defining the methodologies to be used
  and the level of detail required in the evaluation of alternatives in the US 281 EIS;
- Following the opportunities for cooperating and participating agencies involvement, Alamo RMA, TxDOT and FHWA agreed on the methodologies to be used and the level of detail required in the evaluation of alternatives in the US 281 EIS

Terry M. Brechtel Executive Director

Alamo Regional Mobility Authority

Melissa Neeley

**Project Delivery Director** 

**Texas Department of Transportation** 

Justin Ham, P.E. Urban Engineer

Federal Highway Administration, Texas Division



# **Agency Correspondence**





November 4, 2010

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TERRY M. BRECHTEL **EXECUTIVE DIRECTOR** 

US 281: Loop 1604 to Borgfeld Drive Environmental Impact Statement, CSJ 0253-04-138

Re: Section 6002 of SAFETEA-LU – Coordination on Methodologies to be Used and Level of Detail required in the Analysis of Alternatives

Dear

The Alamo Regional Mobility Authority (Alamo RMA) in cooperation with the Federal Highway Administration (FHWA) and the Texas Department of Transportation (TxDOT) is preparing the above referenced Environmental Impact Statement (EIS) for US 281. We are transmitting the October 2010 update of the draft Coordination Plan. The Coordination Plan was previously sent to your agency in August 2009.

In accordance with Section 6002 of SAFETEA-LU, we are also providing an opportunity for involvement by cooperating and participating agencies in defining the methods and level of detail in the analysis of alternatives for the EIS. The attached table describes the proposed resource specific methodologies to be used and the level of detail required in the analysis of the alternatives in the US 281 EIS. Please take this opportunity to review and comment on the information presented in the attached table. Your comments are requested by February 8, 2011.

In accordance with 40 CFR 1503.3(b), if your agency disagrees with the proposed methodology to be used in the analysis of an alternative, please provide an alternate methodology and the reason why the alternate methodology is your agency's preference.

After the February 8, 2011 comment deadline, the Alamo RMA, FHWA and TxDOT will consider all comments received and make a decision on the methodology and level of detail to be used in the analysis of alternatives in the EIS. The joint lead agencies may revise a methodology at any time. If substantial changes occur, collaboration with the agencies with jurisdiction by law in that methodology will occur before the methodology is revised.

Ten M. Brechtel

If you have any questions or would like to discuss the proposed project or methodologies in more detail, please contact:

Ms. Lisa Adelman Legal Counsel to the Alamo RMA 1222 N. Main Avenue, Suite 1000 San Antonio, Texas 78212 (210) 495-5499 LAdelman@AlamoRMA.org

Thank you for your cooperation and interest in this proposed project.

Sincerely,

Terry M. Brechtel

Executive Director

Enclosures: Draft Coordination Plan (October 2010) and the Draft US 281 EIS Methodologies and Level of Detail in the Analysis of Alternatives Table

cc: Vicki Crnich, TxDOT – Environmental Affairs Division Justin Ham, P.E., Texas Division, FHWA

From: <u>Lisa Adelman</u>

To: Robertson, Jim; Bruck, Tricia

Cc: <u>Justin.Ham@dot.gov</u>; <u>Vicki.Crnich@txdot.gov</u>

Subject: FW: Tonkawa Tribe of Oklahoma

Date: Tuesday, November 09, 2010 2:31:23 PM

Attachments: <u>image001.jpg</u>

image003.jpg

From: Miranda Allen [mailto:mallen@tonkawatribe.com]

Sent: Tuesday, November 09, 2010 11:53 AM

To: Lisa Adelman

Subject: Tonkawa Tribe of Oklahoma

# TONKAWA TRIBE OF OKLAHOMA NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT

• 1 RUSH BUFFALO ROAD, TONKAWA, OKLAHOMA 74653 •

• PHONE (580) 628-2561 • FAX: (580) 628-9903 •

WEB SITE: www.tonkawatribe.com

Ms. Lisa Adelman Legal Counsel to the Alamo RMA 1222 N. Main Avenue, Suite 1000 San Antonio, Texas 78212 (210) 495-5499

LAdelman@AlamoRMA.org

Date: November 9, 2010

Regarding the proposed methodologies to be used and level of detail required in the Analysis of Alternatives, we submit the following:

The Tonkawa Tribe has no problems or concerns with the proposed methodology to be used in the analysis.

We appreciate notification by your office of the many projects on-going, and as always the Tonkawa Tribe is willing to work with your representatives in any manner to uphold the provisions of NAGPRA to the extent of our capability.

# Respectfully,

# Miranda Nax'ce Allen

Newsletter Editor, PO/CHK REQ Clerk, Executive/Museum Assistant, NAGPRA Representative
Tonkawa Tribe of Oklahoma
1 Rush Buffalo Road
Tonkawa, OK 74653
Phone: (580) 628-2561 x103

Fax: (580) 628-9903

E-mail: mallen@tonkawatribe.com & info@tonkawatribe.com

Website: www.tonkawatribe.com

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Bryan W. Shaw, Ph.D., *Chairman*Buddy Garcia, *Commissioner*Carlos Rubinstein, *Commissioner*Mark R. Vickery, P.G., *Executive Director* 



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 10, 2010

Ms. Lisa Adelman Legal Counsel to the Alamo RMA 1222 N. Main Avenue, Suite 1000 San Antonio, TX 78212

Re: TCEQ Grant and Texas Review and Comment System (TRACS) #2010-517, Bexar

County - US 281: Loop 1604 to Borgfeld Drive

Dear Ms. Adelman:

The Texas Commission on Environmental Quality (TCEQ) has reviewed the above-referenced project and offers following comments:

We look forward to reviewing environmental assessment documents as they become available.

We have no comment on this project

Thank you for the opportunity to review this project. If you have any questions, please call Ms. Tangela Niemann at (512) 239-3786.

Sincerely,

Jim Harrison, Director

Intergovernmental Relations Division

# **TEXAS HISTORICAL COMMISSION**

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November 30, 2010

Terry M. Bretchtel Alamo RMA 1222 N. Main Ave., Suite 1000 San Antonio, TX 78212



Re: Project review under the Antiquities Code of Texas and National Historic Preservation Act, Proposed US281 Draft EIS in Bexar County (TxDOT)

Dear Mr. Bretchtel:

Thank you for your correspondences concerning the above referenced project. This letter presents the comments of the State Historic Preservation Officer and Executive Director of the Texas Historical Commission (THC), the state agency responsible for administering the Antiquities Code of Texas.

Because the THC has a Programmatic Agreement with TxDOT and the Federal Highway Administration, and a Memorandum of Understanding with TxDOT which both provide for our cultural resource coordination under the jurisdiction of the National Historic Preservation Act and the Antiquities Code of Texas through the Environmental Affairs Division of TxDOT, we will await that coordination before we respond concerning potential cultural resources associated with the above referenced proposed highway improvement.

Thank you for your assistance in the protection of our State's cultural resources, and if you have any questions please contact Mark H. Denton of our staff at (512) 463-5711.

Sincerely,

for

Mark Wolfe

**Executive Director** 

MW/mhd

cc: Scott Pletka (TxDOT-ENV)





February 3, 2011



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Lee M. Bass Chairman-Emeritus Fort Worth

Carter P. Smith Executive Director Mr. Terry Brechtel Alamo Regional Mobility Authority 1222 N. Main Avenue, Suite 1000 San Antonio, TX 78212

RE: US 281: Loop 1604 to Borgfeld Drive Environmental Impact Statement (EIS) (CSJ-0253-04-138), San Antonio, Bexar County: Section 6002 of SAFETEA-LU – Coordination on Methodologies to be Used and Level of Detail Required in the Analysis of Alternatives

Dear Mr. Brechtel:

Texas Parks and Wildlife Department (TPWD) has reviewed the proposed methodologies and level of detail for development of the alternatives analysis for the US 281: Loop 1604 to Borgfeld Drive EIS provided in your November 4, 2010 letter. As a participating agency, TPWD appreciates having the opportunity to review the information provided on the draft resource specific methodology for the EIS (Table 1) and the attached Coordination Plan. The information provided is consistent with our understanding of the NEPA process and the Memorandum of Understanding between TPWD and the Texas Department of Transportation. TPWD looks forward to continued involvement on this project.

Sincerely,

Karen H. Clary, Ph.D.

Wildlife Habitat Assessment Program

Karen H. Clary

Wildlife Division

KHC:gg.15582

Email: karen.clary@tpwd.state.tx.us

Tel. 512-389-8054



January 28, 2011

Dianna Noble, P.E., Director Texas Department of Transportation, Environmental Affairs Division 118 East Riverside Drive Austin, TX 78704

Loop 1604 Environmental Impact Statement: U.S. 90 to Interstate 35 North U.S. 281 Environmental Impact Statement: Loop 1604 to Borgfeld Drive

Re: Section 6002 of SAFETEA-LU – Coordination on Methodologies to be Used and Level of Detail required in the Analysis of Alternatives – Traffic Noise

Dear Ms. Noble:

The purpose of this letter is to document that both of the above referenced Environmental Impact Statements (EISs) are currently following TxDOT Guidelines for Analysis and Abatement of Traffic Noise dated June 1996, revised July 1997, and to request clarification of how the proposed new noise guidelines will be applied to the two Draft EISs. The Alamo Regional Mobility Authority (Alamo RMA) in cooperation with the Federal Highway Administration (FHWA) and the Texas Department of Transportation (TxDOT) is preparing the above referenced EISs for proposed improvements to Loop 1604 and U.S. 281. To demonstrate compliance with Section 6002 SAFETEA-LU, FHWA and TxDOT requested that Alamo RMA prepare Scoping Memoranda describing the proposed resource specific analytical methods to be used in each EIS, the level of detail required in the analysis of the alternatives in each EIS, and if different, include an explanation for such difference in treatment. During the FHWA and TxDOT Scoping Memoranda review process, Alamo RMA received a memo dated November 15, 2010 from your office regarding Guidance for Highway Traffic Noise Analysis and Abatement. The memo states the following: "Any traffic noise analysis and proposed abatement, final design analysis, or noise workshop held prior to July 13, 2011 must comply in accordance to the current TxDOT Guidelines for Analysis and Abatement of Traffic Noise dated July 1997."

TxDOT's current 1997 guidance includes the following four objectives:

- 1. Identify areas where possible noise impacts may occur for each project alternative.
- 2. Consider and evaluate abatement measures to mitigate these impacts.
- 3. Propose implementation of feasible and reasonable abatement

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## measures.

4. Communicate the results to the public and local officials.

Model runs and associated contours¹ are indicative of worst-case scenarios, meaning that the models contain no intervening terrain, no building shielding, no building row shielding, no forestation, etc. Site specific impacts were identified and illustrated on maps. Preliminary noise barrier locations can be identified on maps and included in each Draft EIS. More than 50% of the land use abutting the Loop 1604 and U.S. 281 rights-of-way meets the 1997 Guidance's definition of undeveloped land. Most of the remaining developed land is either commercial or consists of some other transportation land use such as other roadways and/or parking lots. Following the current development trends, a high probability exists that the undeveloped land will eventually be occupied by commercial uses and will act as a buffer for residential subdivisions located farther away, subsequently acting as a noise shield; thus, reducing the number of impacts that are currently predicted. The results of the noise analyses would be available to the public and local officials when each Draft EIS is released for public review and comment.

In the analysis proposed to included in each Final EIS, traffic noise would be completed in accordance with the new TxDOT noise guidance (anticipated in July, 2011) and include a detailed traffic noise analysis for the Preferred Alternative of each project, including the specific number and location of affected receivers and proposed feasible and reasonable noise abatement. This overall approach to a Draft and Final EIS for traffic noise has been used on numerous approved environmental documents within the recent past from TxDOT and FHWA, a precedent that has guided our approach to the Loop 1604 and U.S. 281 projects.

Noise analyses completed for both the Loop 1604 EIS and U.S. 281 EIS comply with TxDOT's current guidance. The completed noise analyses provide the same level of detail for each alternative under consideration in the Draft EISs. Completing a more detailed noise analysis in the Draft EISs would require the development of additional design detail for each of the alternatives under consideration as well as the development of more detailed traffic data to use in the noise model.

<sup>&</sup>lt;sup>1</sup> Noise model runs did not utilize the Traffic Noise Model (TNM) contour module. The noise model runs were constructed within TNM 2.5 using receivers and roadways to determine the threshold of the 66 dBA line. In the Loop 1604 EIS, 22 separate sound level areas were run for each of the three build alternatives to develop the 66 dBA contour impact distance for each area. Sound level contours were also developed ranging from the mid-70's dBA down to the low 50's dBA. Additionally, 36 field measurements were also taken for the Loop 1604 project. For US 281 EIS, 8 sound levels areas were run for each of the alternatives and their respective options (Non-Toll, Toll, and Managed) for a total of 72 runs to develop the 66 dBA impact contour distance. US 281 sound level contours were also developed ranging from the mid-70's dBA down to the high 50's dBA.

Draft EIS alternatives will continue to be refined based on public and agency input and input received during the Public Hearings. Ultimately, the selection of an alternative as a Preferred Alternative will take into consideration noise impacts along with many other factors. A more detailed noise analysis would not show appreciable differences in predicted noise level impacts beyond the current analyses completed for the Draft EISs. The analysis as proposed provides sufficient information for a decision-maker to consider noise impacts in the Draft EIS process and adheres to TxDOT's current guidance. Completing a more detailed noise analysis for the Draft EISs would extend project schedules between 4 to 6 months, and increase the total project costs by approximately \$750,000. We would like your confirmation that the Draft EISs for Loop 1604 and U.S. 281 would be in compliance with current TxDOT Noise Guidelines, that the approach to compliance as described herein is acceptable, and that the Final EISs for the two projects will be subject to proposed new noise guidelines being developed by TxDOT and FHWA.

We look forward to a timely response to this request so that we can proceed with the Loop 1604 EIS and U.S. 281 EIS projects. Thank you for your cooperation and interest in these proposed projects.

Sincerely,

Terry M. Brechtel Executive Director

Tay M. Porschiel

Cc: Ms. Vicki Crnich, TxDOT – Environmental Affairs Division

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